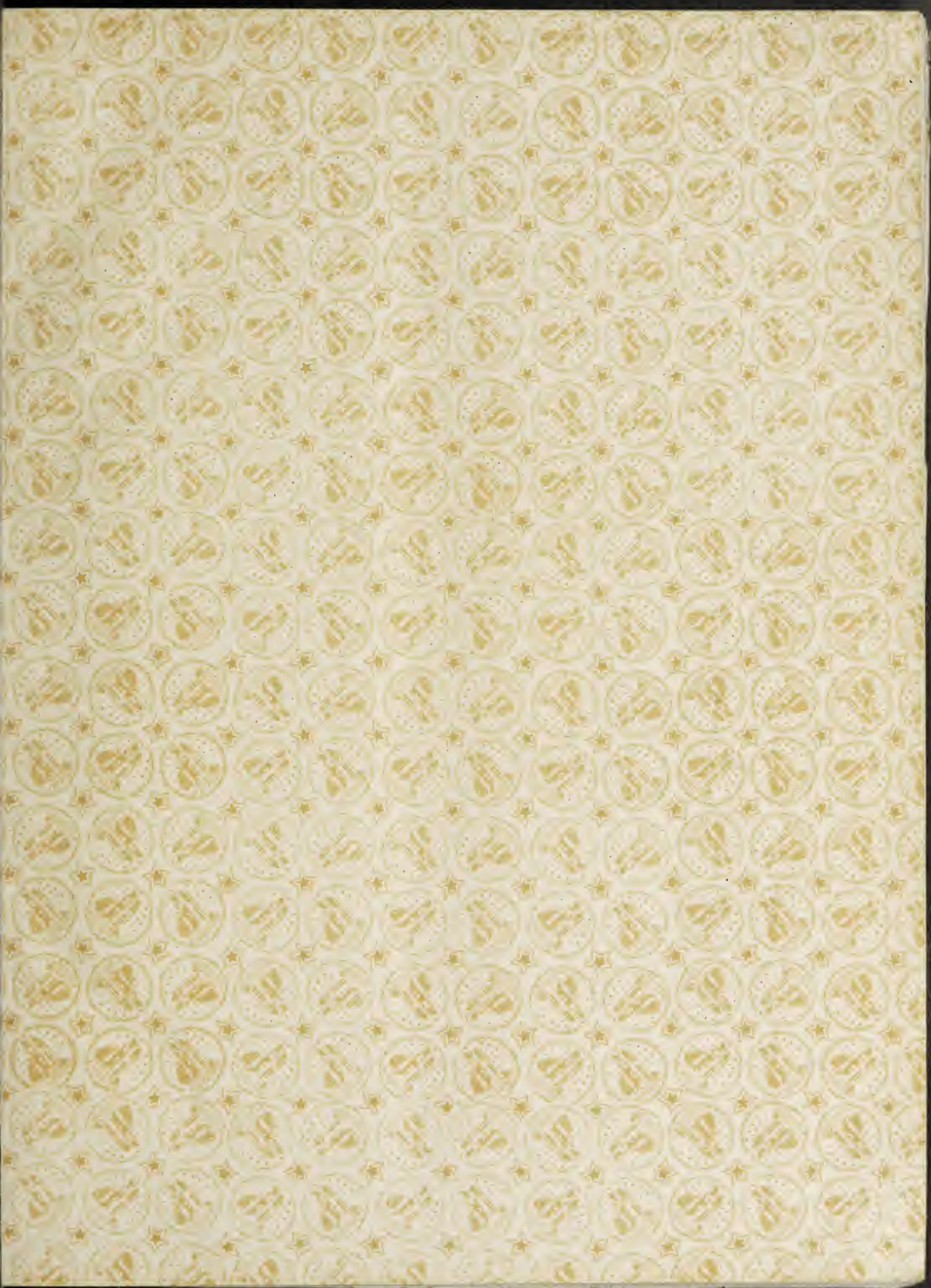


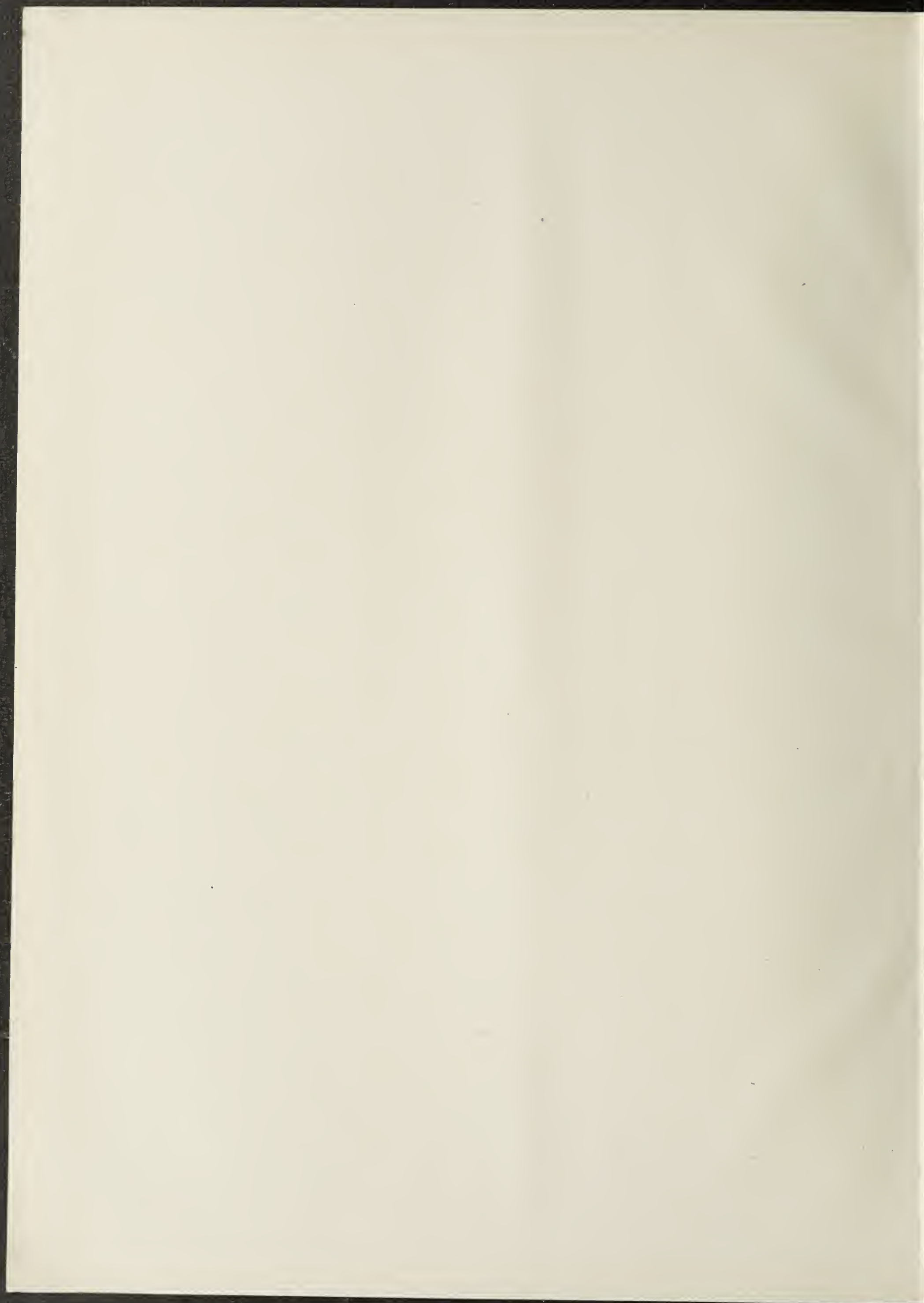
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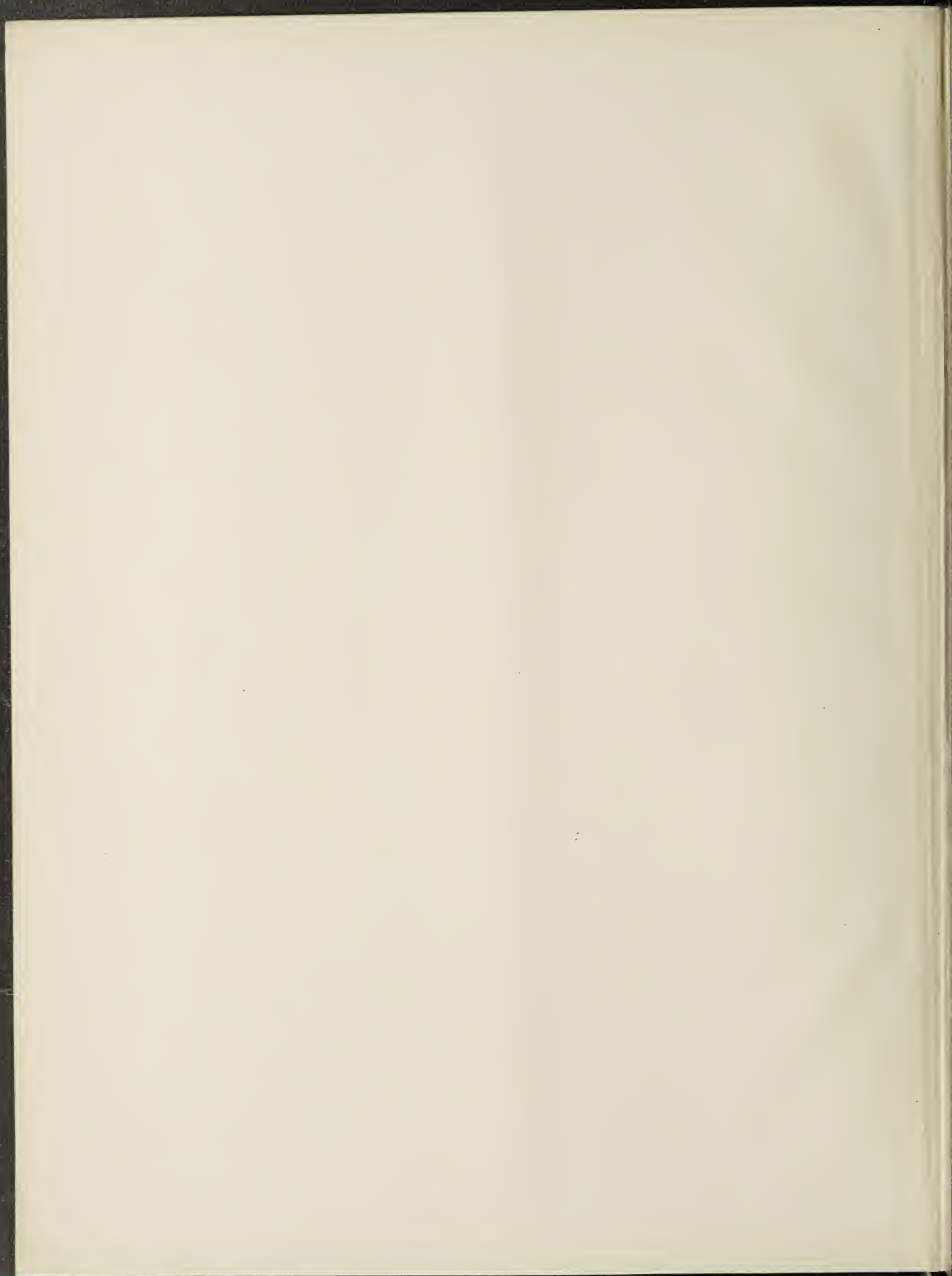
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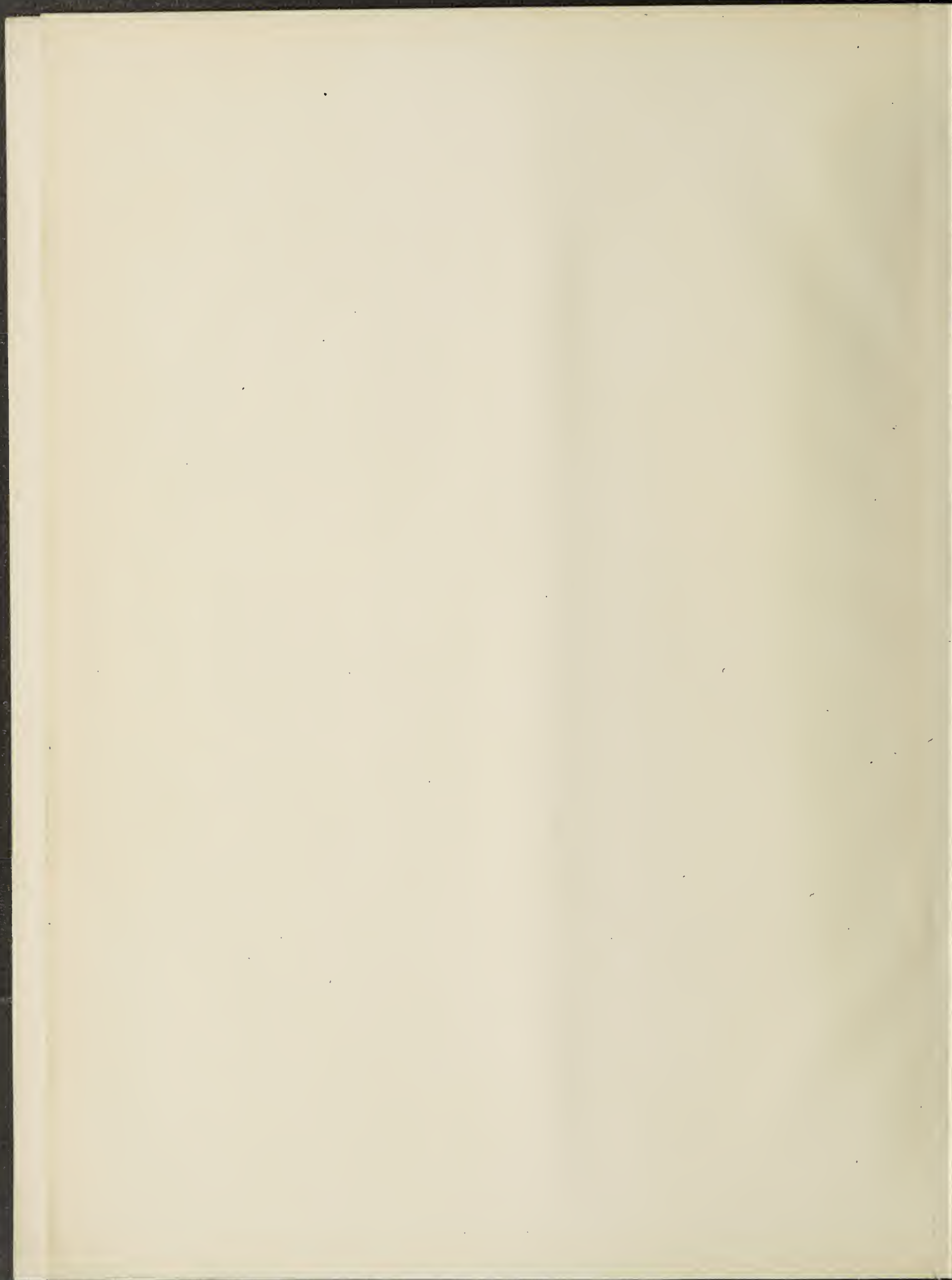
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NUMBER ONE

Chicago, January 15, 1912

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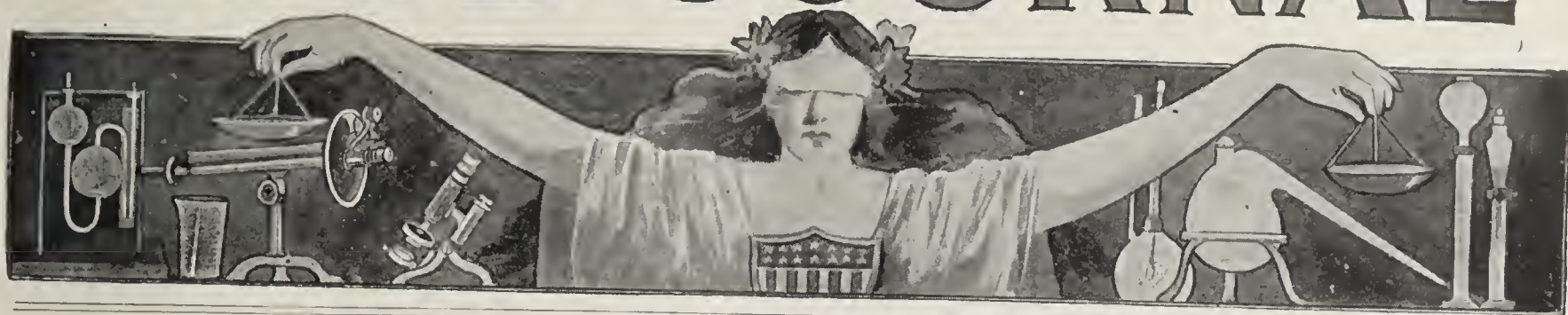
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Work of the Illinois Food Commission for the Year 1911

Annual Report of Hon. Alfred H. Jones, State Food Commissioner

1623 Manhattan Building,
Chicago, Illinois.

To His Excellency, Charles S. Deneen, Governor of
Illinois:

I have the honor to herewith transmit this, my twelfth annual report of the Illinois State Food Commission, for the year 1911, in compliance with that part of Section One, of our new State food law, approved June 2, 1911, and in force July 1, 1911.

CHANGES IN THE DEPARTMENT.

As will be seen from the roster of the Illinois State Food Commission on the first page of this report, many changes have been made during the past year, in the Membership of the State Food Department as well as in the State Stock Food Department, which is a bureau within the State Food Department.

It is made the duty of the State Food Commissioner to enforce the law in regard to the regulation, sale and analysis of concentrated feeding stuffs for domestic animals the same as to enforce the law passed by our General Assembly to prevent fraud in the sale of dairy products, their imitation or substitution, to prohibit and prevent the manufacture and sale of unhealthful, adulterated or misbranded foods, liquors or dairy products, and enforce the state sanitary laws and along with the State Food Standards Commission to adopt standards of quality, purity or strength for the various food products of the state.

Our present General Assembly was more liberal with the Department in the way of appropriations for help and apparatus for the laboratory, as well as a larger appropriation for rents for the department, than ever before.

Since the revision of the food law passed in 1907, as approved June 2, 1911, and in force July 1, 1911, the Commission has taken charge of the sixteenth or top floor of the Manhattan Building, Chicago, except two rooms in the southwest corner thereof. The north part of said sixteenth floor has been devoted to the laboratory, the east side for offices and the remainder of the west side for the Bacteriologists, Inspectors and storeroom for the Department.

Our present General Assembly has assisted the department very much in the way of needful legislation and especially in passing a new sanitary food law, which is "An Act to prevent the preparation, manufacture, packing, storing, or distribution of food intended for sale, or sale of food, under insanitary, unhealthful or unclean condition or surroundings, to create a sanitary inspection, to declare that such conditions shall constitute a nuisance, and to provide for the enforcement thereof." A copy of this new sanitary law, and the rulings made thereunder for the enforcement of same, will be found in this report under their proper titles.

Our present General Assembly has also made many changes in the state food law of 1907, and the changes will be found in added Sections 20-A and 39-A, and amendments to Sections 1, 3, 4, 9, 10, 11, 12, 20, 21 and 40 thereof, and since the new revised state food law of July 1, 1911, went into force additional rulings, standards, etc., have been made and the same are published under their proper heading in this annual report, and the former rules made by the department, for the labeling of the various food articles of the state have been revised, in harmony with the changes

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made in the law and the same are published under their proper head and made a part of this report.

Our present General Assembly has also assisted the department very much in a revision of the state stock food law relating to the manufacture, sale and analysis of concentrated commercial feed stuffs for feeding farm live stock and domestic animals generally by revision of the same—making more definite what are concentrated commercial feeding stuffs and the manner in which they should be sold, as well as larger appropriations for carrying on the work of enforcing the law, and attention is respectfully called to same under its proper title.

The State Food Standards Commission, during the past year, has been very diligent in determining and adopting a standard of quality, purity or strength of milk, cream, ice cream, and many other food products that require a special standard, and the work of the Standards Commission will be found under the proper heading in this report.

HEARINGS AND PROSECUTIONS.

During the past year there have been taken by our Inspectors over 3,673 samples and reported to the office of the State Food Department for the purpose of analysis, or to determine whether they were properly labeled, stamped or branded as the law requires, not taking into consideration the tests made as to milk and dairy products.

As stated, some of these samples were taken for the reason that they were misbranded, or not properly labeled, in conformity with the requirements of the state food law, and others to determine whether they were pure or wholesome, or contained coloring matter or preservatives that were harmful.

Of these samples analyzed more than 2,550 were found to be pure, or to meet the requirements of the law, and about 1,123 were found to be adulterated or mislabeled and illegal and consequently in violation of the food laws.

Under Section 40 of our state food law preliminary hearings are provided for when it appears from the examination, or analysis of the sample that the provisions of the law had been violated, by giving the party or parties offending a notice, in writing, to appear before the commission at the State Food Commission's Office, 1627 Manhattan Building, Chicago, on a day fixed in the notice, together with a copy of the findings, and also, by sending to the party, whose name appears upon the label of the sample taken as manufacturer, jobber or packer, a similar notice.

The object of this provision of the law is to give the party or parties so notified of such charge, an opportunity to be heard before the suit is brought against them, and after such hearing, if it appears there is probable cause of guilt, then such party or parties violating the law, whether dealer, manufacturer, jobber or packer, may be prosecuted for such violations.

Under Section 40 of our new law then, the persons or firms in whose possession were found the various articles of food offered for sale in violation of the law were summoned to hearings, and of the 1,123 hearings granted, 882 cases were adjudged to be of a minor or technical character, such as could readily be cured by the use of labels conforming to the law's requirements, or by the slight changing of the methods of manufacture or sale, and such cases were not prosecuted in the courts, on the agreement of the parties summoned to make the required changes to conform

to the law. In the remainder of the violations, namely, 239, suits were instituted, and of such suits, 143 were terminated within the year and 96 are now pending in the various courts.

DUTIES OF FOOD OFFICIALS.

Every food commissioner and food official in the different states as well as in the United States, whether state or national, is anxious to detect foods that are adulterated or unfit for human consumption, or misbranded, and to punish the seller of them, as will be seen by the reports of the different commissioners.

The public seeking for facts as to the sophistication and false labeling of their foods, therefore, naturally turn to the reports of these food officials, as in these reports are contained a list and description of their discoveries of adulterated and misbranded foods; also of the prosecutions made by them on account of these different violations.

It is therefore incumbent on the commissioner to report the progress made by his department so that the people may be advised, not only as to what foods are wholesome and fit for human consumption, but also as to those foods that are not wholesome, or are adulterated and falsely labeled so as to deceive the purchaser or consumer.

The purchasers and consumers of the various food products of the country, therefore, scan the reports faithful and successful services of these food officials, exact truth. Universal interest has been aroused by the faithful and successful services of these food officials, in the performance of their duties to the public.

The people are not now looking for the "thrills" they used to get before they had these state and national food laws for the enforcement of these laws has driven comparatively all the old sophistications of the people's food from the markets of the country.

For instance, the old story of alum in bread, when no record or discovery of alum in bread had been made; that the confectionery of the children was filled with poisonous chemicals, dyes and fillers; when the reports of nearly every food commissioner in the United States show that the candies and other confectioneries are now generally made of sugar, which is the product of the cane, or the beet, or glucose, which is the product of the corn, colored and flavored with the same colors and flavors that go into the other foods; and that corn syrup, a product of corn, was placed into the honeycomb instead of the products of the flowers by the ever industrious honey bee, when there is no record or discovery that the cells of the honeycomb ever had been filled with the sweets of the corn.

And again tea was formerly under suspicion and accusations were made that it was adulterated with willow leaves, tea leaves, clay and poisonous dyes. Now under the national pure food law all the tea imported into the United States has to pass inspection and consequently the tea is comparatively pure.

Formerly the meats of this country have been attacked on account of containing harmful chemicals, but since the passage of the national food law and the rigid inspection by the national and state food inspectors, it is found that the law is being generally observed by the packers of the various meat products and that the meats of the country today are entirely wholesome and sanitary.

CO-OPERATION AND UNIFORMITY.

As stated in our former report, the great trouble in the past was that we had no national food law to

regulate the interstate commerce in foods, and the laws of the different states not being uniform, there could be no co-operation or unity of action among the various food officials of the state. Each state had its own laws, rulings, labels and standards as to how foods should be prepared, labeled and sold, and the commissioners of the different states had been interpreting their respective laws and requiring the various foods to be prepared, labeled and sold so as to conform to their respective laws without any regard to uniformity or co-operation, hence the manufacturer and packer of foods not only of our state, but of every other state in the Union, had to keep a different set of labels for each state and territory of the Union, and prepare their foods, and sell them in conformity with those requirements.

Since the passage of the national food law and rulings and standards made thereunder, and state laws modeled after the national law and rulings and standards made to conform with the rulings and standards of a national food law, we now have comparative uniformity of action, and substantially one set of labels for the various food products will suffice for every state and territory in the Union.

The paramount effect of these laws, state and national—and obtaining uniformity and co-operation under the same—upon the manufacturers and packers of foods is that it requires them to properly label foods, so as to make the public familiar with the foods prepared by them.

Thirty-five states have already revised their state food laws so as to conform with the national food law that went into effect January 1, 1907, and with the efforts being made in the other states to have their laws revised and modeled after the national food law, so as to conform to it, it will be but a short time until every state in the Union will be in line with the national food law.

These state food laws are enacted under the police powers of the state; a power not possessed by the national government which is inherent within the state for the purpose of protecting the lives, health and morals of the people. The laws that have been enacted in the different states and in the nation have been so enacted at the instance of public sentiment and demand. That demand was superinduced by the knowledge of the existence of fraud—the result of predatory commercialism—such commercialism predicated its assumed rights upon the assumption that its action was a requirement of competition, rendered necessary by the public demand for cheaper food products, all of which was based on a false premise in so far as it presented or defended in that light.

The underlying fundamental principle that has produced such fraud in the past has been commercial greed. Such action has produced resentment and reaction that has resulted in the laws now upon the statute books of the several states and of the nation against commercial fraud and misrepresentation in the manufacture and sale of the various food products.

Such statutes have met with the approval of the best manufacturers and retailers, and they stand today among their warmest sponsors and supporters, anxious with all food officials that these laws shall be upheld.

Fifteen years ago the state food commissioners and state food officials of those states that had state food laws organized an association under the name of "The Association of State Food and Dairy Departments" for the purpose of securing a national food law and

uniformity of legislation in regard to the manufacture and sale of foods within the different states.

When I was appointed state food commissioner, in 1899, I immediately joined this association and have been a member of it ever since, and have co-operated with the members of this association in securing a national food law and urging upon the commissioners and food officials of the different states the necessity of having their food laws revised and modeled after the national food law.

After the passage of the national food law, in 1906, the title of this association was changed so as to include the national food officials, and it is now known as "The Association of State and National Food and Dairy Departments."

The association has had its annual meeting each year and published the proceedings of its annual conventions, the last annual meeting being held in the City of Duluth, in the State of Minnesota, from August 21st to 24th, 1911, inclusive, and at this meeting resolutions were again passed reaffirming its confidence and faith in the national food law, urging co-operation between state and national food officials, and commending the great work accomplished thereunder, and I desire to call attention to Resolutions Nos. 5, 6, 8, 9, 11, 12, 13 and 14, which read as follows:

Number 5. *Resolved*, that this Association reaffirm its belief in the importance for the sake of all concerned, that the National and State food laws should be based upon the same broad principles, and that so far as practicable under the conditions existing in the respective states, should follow the general form and language of the National Food and Drugs Act of 1906.

Number 6. *Resolved*, that this Association expresses its heartiest appreciation of the work of its Committee on Co-operation, and its sincere thanks for their support presented at this Convention, outlining a comprehensive plan for practical co-operation among the states, and between the states and the United States in the enforcement of food laws, and that this Association recommends that the said plan be adopted and followed for the good of our work, and further

Resolved, that we extend out thanks to the United States Department of Agriculture for the most valuable aid afforded by it in the working out and perfection of that plan.

Number 8. *Resolved*, that this Association recognizes the great importance and urges the adoption of Uniform Food Sanitation laws by the several states, to the end that all our American food products may be produced, manufactured and distributed under the most cleanly and hygienic conditions.

Number 9. *Resolved*, that this Association respectfully recommends and urges that Congress promptly enact into law the pending Mann-Stevens bill, requiring that all packages of food be branded with the true net weight or measure.

Number 11. *Resolved*, that this Association heartily commends the excellent work of the dairy division of the bureau of animal industry, looking towards the improvement of milk supplies, and urges upon Congress the importance of more liberal provisions for the continuance of such work.

Number 12. *Whereas*, many of the directions for use printed upon the containers for evaporated milk and sweetened condensed milk give to the consumer no sufficient information as to the dilution of the product requisite to reducing it to its equivalent of normal milk, and therefore, doubtless lead in many cases to over-dilution for infant feeding; therefore be it

Resolved, that this Association earnestly urges upon the legislatures of the several states the desirability of requiring that the labels under which these products are offered for sale shall state the proportion of water to be added in order that the concentration be brought back to that of whole milk.

Number 13. *Resolved*, that we recommend the appointment by the President of this Association of a committee of five bacteriologists, members of this organization, to report to our next meeting its recommendations as to applying the methods prescribed by the Department of Agri-

culture for bacteriological tests, having due regard for the skill and experience necessary in adopting new and intricate methods, where special education and training are necessary.

Number 14. *Resolved*, that a committee of five be appointed by the President of this Association with instructions to study the subject of cold storage, and to draft a measure to be presented at our next annual convention which shall incorporate in its provisions just and reasonable regulations for the operation of cold storage warehouses, and the storage of foodstuffs therein.

It will be seen by these resolutions, and the report of the proceedings of the convention held by this association at Duluth, that every state food commissioner and food official, as well as the national food officials, voted unanimously in favor of these resolutions.

One of the difficult questions which have perplexed state and national food officials, in the past, has been in regard to "Original importers' packages and the labeling of packages in intrastate traffic that have been imported into the state as part of the original package."

At the request of the Committee on Program, I delivered an address before this association, at Duluth, Minn., on the subject, and as this question interests the manufacturers, packers and dealers in foods in our state, and is one that is constantly coming up for discussion, not only before the manufacturers, packers and dealers in foods in our state, but other states as well, and one that interests both state and national food officials, I have, at the request of many of the members of the association and food officials, inserted the essential part of this address and make it a part of this, my report, which reads as follows:

There are no questions before the American people today of greater importance than those relating to the Federal and state control over foods.

Power was granted to Congress to regulate the sale of foods by the importers in the original package and the labeling of packages for intrastate commerce that may be, or have been, imported into the state as part of the original packages, as a safe-guard against commercial hostilities and reprisals between the states, as well as to provide for uniformity in trade among the states, and it was only in 1906 that this clause in the Constitution of the United States was put into full force and effect, as to foods and drugs, by the passage of the Federal Food and Drugs Act with power to make rulings as to the manner in which foods and drugs shall be prepared and sold thereunder.

This power remained practically dormant until the passage of the Federal Food and Drugs Act in 1906. Since the passage of this national law it has been clearly recognized as a great affirmative and constructive power in the National Government, not limited to composing differences between state laws and system, but constitutionally capable of effective and fruitful development in a region all its own.

In my judgment, it is one of the greatest powers lodged in the Federal Government, affecting the welfare of the whole people, and the possibilities of its application are co-extensive with the possibilities of the expansion of the vast subject to which it applies.

Nothing, therefore, is of more consequence in the enforcement of national and state food laws than an accurate understanding of the scope of the national and state powers in respect to commerce in foods and drugs, and the activities relating to commerce, for no effective regulation is possible in either sovereignty if the power of the one could be usurped, or obstructed, by the other.

This will be understood and conceded, except by those who appear to think the Federal Government can constitutionally accomplish everything that seems good for the people, and are constantly raising expectations upon this line which cannot possibly be fulfilled.

Notwithstanding the complex system growing out of these two sovereignties—national and state—which prevail in this country, the American people have a complete and entire system of government with all the powers necessary to deal with every subject and situation. All

governmental authority is included in one or the other, or in both of the two sovereignties, which constitute the American system.

The fact that the state governments are supreme in state affairs, and the National Government supreme in national affairs, does not result in the deduction that there are any affairs which may escape government and state control.

Whether the constitutional powers of the United States and the reserved powers of the state remain exclusively a state affair, subject to state control, or a national matter, subject to national control, is one of fact as well as law, and it can be readily understood that the facts differ at different periods of our development and under different circumstances relating to the subject.

It was but natural prior to the enactment and enforcement of the Federal food and drugs act that these variations in the laws of the different states existed and that they should be interpreted differently by the different food officials, and as a consequence, that the manufacturers, packers and dealers in foods should not only be harassed and annoyed, but put to a great expense and inconvenience on account of same.

The consumer of one state would read the labels of the article sought as printed under the laws and the requirements of that state and find the label read one way, and examine the same article of food as prepared in another state and find that under the requirements of that state it read entirely different—consequently, he was perplexed and left in a state of doubt and uncertainty—and for that very reason, if no other, the laws failed to accomplish the objects sought.

How different it is now—since the passage of the Federal food and drugs act, the national food authorities have prescribed rulings, as to the manner in which nearly every manner of foods and drugs shall be prepared and labeled—and nearly every state in the Union has had its laws revised and modeled after the Federal food and drugs act, consequently, we can now have the most complete uniformity—unity of action and co-operation between national and state food officials in the enforcement of national and state food laws.

Now instead of the old order of things—when every state had its own food laws, its own set of rulings, labels, standards, etc., different from every other state in the Union—now we have a Federal food and drugs act, covering all the requirements, and nearly every state in the Union with laws modeled after the national law—substantially adopting the rulings for the labeling, manufacture and sale of foods as provided thereunder.

The framers of our National Constitution did not overlook the fact that the regulation of the commercial relations between the states was as much within the province of the National Government as the regulation of foreign commerce, and in Article 1, Section 8, of the Constitution the power was expressly delegated to Congress "To regulate commerce with foreign nations and among the several states."

Here, therefore, is one forum to which the individual citizen engaged in interstate commerce may look, and it is certain whenever Congress can, within constitutional limits, lead the way, there lies the greatest chance for uniformity.

States are far more likely to follow and adopt the provisions of a national law, as a model, than the statute of any sister state.

The original importer's package of commerce is a package, bundle, or aggregation of goods put up for convenience of transportation into whatever covering; or receptacle the importer may elect, and delivered by him to the carrier at the initial point of shipment, to be transported from one state into another; and when a number of smaller packages are for convenience placed within a larger package, or bound together in a bundle, such bundle, or large package, will constitute the original package of commerce; and when the bundle is unbound, or the larger package opened, in order to expose the smaller package for sale, the goods will become mingled with the general property of the state and cease to be subjects of interstate commerce, and there the state law becomes paramount, and the food becomes the subject of state control.

When foods designed for exportation from one state into another start on their way—or journey—at the initial point of transportation, they at once become subjects of interstate commerce, and are protected by the Federal Constitution and Federal laws from any interference or

regulation by any state through which they may pass, and until they reach their ultimate destination, notwithstanding, on the way, they may be delayed for a reasonable length of time on account of inadequate means of transportation, or for reshipment, or assortment, or distribution, or on account of any accident, or any other cause which may supervene to prevent the goods going directly from the initial point of shipment to the place of destination.

"Original importers' packages and the labeling of packages in interstate traffic that have been imported into the state as part of the original package" was clearly provided for by the Federal food and drugs act that went into effect January 1, 1907, and the Supreme Court of the United States in Volume 49, Law Edition, page 419, after a review of the various decisions in regard to the regulation of interstate traffic restates the law as follows: "That the transportation of merchandise from one state into and across another is intrastate commerce and is protected from the operation of state laws from the moment of shipment, whilst in transit and up to the ending of the journey by the delivery of the goods to the consignee at the place to which they were consigned."

Again in Law Edition, Volume 48, page 404, the Court reiterates the doctrine as follows: "The states have no power to regulate commerce with foreign countries or with each other, this power has been delegated to the Congress of the United States and that body can, by law, determine what shall or shall not, be permitted to be imported. With the right of importation follows the right of sale in original package, and therefore, the states cannot prohibit the sale of articles of commerce within their borders. The states cannot, under the guise of inspection, or under their reserved police powers, prohibit the importation into their jurisdiction of sound meat, under the pretense that it may be damaged or decayed, or spirituous or malt liquors for fear that they may intoxicate, or oleomargarine for fear it may be adulterated."

Hundreds of prosecutions have been brought under this Federal food and drugs act covering nearly all phases of legitimate food and drug control, and no serious defect has yet been discovered.

This law so far as it relates to foods covers all articles in the original package used for foods, drink, confectionery or condiment by man or other animals. Its terms are broad and comprehensive. It provides against all adulteration, the use of harmful substances and false labeling. It provides opportunity for the injured party to be heard in defense of its products before court procedure or seizure. It provides a means for co-operation between state and National food officials by requiring the National authority, administering the law, to examine and report upon any specimen of food submitted by the health officer of any state. It is the only present basis for uniformity on this subject throughout the various states of the union.

The best evidence of the strength and completeness of this Federal food and drugs act lies in the fact that it has been substantially adopted by the Legislature of thirty-five states.

The Federal food and drugs act has also received the highest commendation and approval of the Commissioners on uniform state laws, appointed by the Governors of the various states.

In conclusion I wish to state that the subject assigned me—"Original Importers' Packages and the Labeling of Packages in Intrastate Traffic That Have Been Imported Into the State as Part of the Original Package"—should be the study of every state food commissioner and food control official—for back of it is the strong arm of the National government reaching out into every state, territory, the District of Columbia and our insular possessions, and saying to them, "Here is provided a way by which they may determine, under our interstate commerce laws in foods, not only as to the kind and quality of the foods, but whether they are properly prepared and labeled, as required by our National food laws."

FOOD LAWS GENERALLY OBSERVED.

An examination of the annual reports of state and national food officials show that nearly all the violations for which the numerous prosecutions are brought are for the sale of foods that are in themselves not unwholesome, or injurious to the health—but are sold upon false representations as to their ingredients, or

are unfit for human consumption on account of uncleanness or natural decay.

A further examination of the reports of state and national food officials, since the passage of the national food law, and the enactment of state food laws in harmony with the national law, show that such harmful preservatives as formaldehyde, hydrofluoric acid, boric acid, salicylic acid, and all compounds and derivatives thereof, are seldom found in food products, as these preservatives are now declared unwholesome and injurious to health, and I am pleased to state that this is especially true in our state, as the manufacturers and packers of foods are generally observing our law and rulings against these preservatives.

The greatest trouble we have had in the past year has been in the use of coloring matter in foods, as it is found in nearly every case in which it has been used, except in confectionery, that it has been used for the purpose of covering up defective ingredients or to make the article appear really better than it was, and while the food laws allow harmless coloring matter to be used in most foods, the manufacturers and packers take advantage of the law, and deceive the public by using a cheaper ingredient where it is a compound article, or some inferior article, and color it up so as to make it look like a better or higher-priced article of food, and it is the judgment of all or nearly all food officials that coloring matter in all foods, except confectionery, should be absolutely prohibited.

The department has accomplished more in the way of co-operation, not only with state and national food officials, but with the State Board of Health, the boards of health of the different cities of our state, the mayors of the different cities, the civic federations organized throughout the state, the State Federation of Women's Clubs and similar organizations, than in any former year.

GENERAL WORK OF THE DEPARTMENT.

During the past year we have given many exhibitions of adulterated foods by having on exhibition the articles of adulterated foods as analyzed by our chemists, with maps and charts illustrating same; also lectures explaining the maps and charts describing the nutritive value of foods, the use of food constituents, the composition of food materials, dietary standards, relative protein value of foods and relative heat and energy values of foods, and the department has incorporated an outline of the work in Bulletin No. 22 under the title of "Nutritive Value of Foods," and the same is incorporated in this report along with the other bulletins issued by the department, and I desire to call attention to same as this is a new line of work and one that has created much interest, not only in our state, by its publication, but in many other states in the Union. These exhibitions have been given in many cities of the state, including Peoria, Galesburg, Carbondale and Chicago.

In addition to these exhibitions Mr. John B. Newman, Assistant Commissioner, Dr. T. J. Bryan, State Analyst, and myself have, at various times, delivered addresses before these state organizations illustrating the work done by the State Food Department as well as explaining the food law, its uses and abuses.

The department has mailed out the annual report to the judges of our Supreme Court, our circuit judges, county judges, states' attorneys, members of the Gen-

eral Assembly, the large manufacturers and packers, the large retail grocers, the creameries, milk condensaries, bottling plants, the public libraries, and food officials that might be interested in the same.

I desire to call especial attention to the work of the State Laboratory under the direction of Dr. T. J. Bryan, as he has given a very full and complete report of the work of the laboratory in this report, showing the many new sophistications of the different foods on the markets of the state. It is wonderful how ingenious some of our manufacturers and packers are, and the report of Dr. Bryan gives a very full and complete report of same as well as the official samples analyzed, and the tables of analysis, and will justify any one who may be interested in food control work and the discoveries of the laboratory to make a study of same.

I also desire to call due attention to the report of Mr. John B. Newman, Assistant State Food Commissioner, embodied in this report. Mr. Newman has given a very full and complete report of all hearings before the department, and especially as to the condition of the dairy products of the state and has included in his report a list of creameries and cheese factories, milk condensary plants and milk bottling plants. Mr. Newman has been for over three years working on these tables and has obtained substantially a complete list of these plants. While the work has been great, the dairy industries of our state are of such importance—Illinois being the first dairy state in the Union—that it fully justifies the effort involved in compiling same.

The report of Dr. Bryan further shows the results of the laboratory in regard to the analysis of stock foods under the state stock food law regulating the manufacture, sale and analysis of concentrated commercial feed stuffs for feeding live stock and domestic animals, and I desire to call attention to his report of same as well as the tables of analysis and tables showing the average, partial composition of feeding stuffs as well as a general outline of the work performed by the laboratory in regard to these stock foods.

I desire to call the attention of the report of Mr. Charles F. McKinley, Attorney for the State Food Department, as Mr. McKinley has had charge of the prosecutions of those cases that are submitted to the state's attorneys of the different counties of the state and his report will show the many difficulties encountered by the department in these prosecutions and the subterfuges adopted by many of those charged with violation of the laws in framing up a defense to the charges. A reading of his report will be very interesting to any one who may be interested in the prosecution of our food laws.

Attention is also called to the reports of the inspectors as in these reports are given a history of the inspections made as well as the sanitary conditions of many of the places where foods are manufactured, packed or sold, and especially in the improvements of the slaughter houses and meat markets and other places where foods are manufactured and sold in the state—and it will be seen by the reports of the Inspectors that there has been a great change for the better in the sanitary conditions, not only of the foods, but of the places where foods are manufactured, packed or sold.

I desire also to call attention to the report of suits brought and still pending during the past year by the department. The reports show that the manufac-

turers, packers and dealers in foods when notified, as provided in Section 40 of the food law, have responded to the notice and where it has been shown that they were guilty of clearly violating the law, they have come forward, plead guilty and paid their fines, or in cases where they were trying to evade the law, prosecutions were had and these prosecutions were generally successful and fines were imposed against them, and the fines and costs were paid. In these prosecutions the state's attorneys in the different counties of the state have generally assisted the department when called upon in prosecuting the cases, but in one or two counties in the central part of the state we have had considerable trouble in securing the services of the state's attorneys, but the department does not intend to abandon prosecutions in those counties, but try to reach the state's attorneys through public sentiment, as I feel confident that the sentiment in those counties are decidedly in favor of prosecuting these violators of the food law, and the department in 1912 will more vigorously look after cases in those counties than in any former year. As stated, we have had many prosecutions—and some of them hotly contested—but in nearly every prosecution the department has been successful for the reason that no prosecutions have been begun until it was satisfactorily demonstrated from all the facts and circumstances that the party or parties accused were clearly guilty of violating the food laws of the state.

Attention is also called to the list of manufacturers, jobbers or dealers of concentrated commercial feed stuffs, who have paid their license fees for the year 1911; also to the financial statement and decisions of the Supreme Court of our state as well as to the form of indictments and informations prepared for the benefit of the attorney of this department as well as the state's attorneys of the different counties of the state to assist them in preparing the prosecutions of the various violations under the food law.

Attention is also called to the bulletins issued by this department since the passage of the new state food law, numbering from one to twenty-five, inclusive. A study of these various bulletins will show that they cover nearly all those articles of food that require a special label; also that the law requires foods to be manufactured under sanitary conditions.

Attention is further called to the instructions to inspectors and others submitting samples for analysis; also to the principles upon which food standards are based as well as to tentative food standards adopted by the Illinois State Food Commission.

I desire to call attention to the history of state food commission laws, as well as the new revised dairy and food laws of 1911, and the stock food law for the sale of concentrated commercial feeding stuffs for live stock and domestic animals as amended in 1911.

Attention is also called to the new national food law in force January 1, 1907, which is printed in this report as an appendix to the same.

The thanks of the department are hereby tendered to the public press of the state, the Civic Federation and women's clubs, as well as to the food journals and magazines for the valuable assistance rendered the department. Publicity has helped the department very much, as by this publicity the public is informed as to those manufacturers, packers and dealers who are violating our food laws, and the consumers of the state are kept advised as to who these illegal

manufacturers and dealers are and accordingly refuse to patronize them.

GENERAL SUMMARY.

I have arranged this report for publication as follows:

1. Roster of members.
 2. Members of the Illinois State Food Standards' Commission.
 3. Table of contents.
 4. Letter of transmittal.
 5. Report of Alfred H. Jones, Commissioner.
 6. Report of John B. Newman, Assistant Commissioner.
 7. Report of T. J. Bryan, State Analyst, and of Laboratory, including tables of analyses, etc.
 8. Report of Chas. F. McKinley, Attorney.
 9. Report of Food Inspectors.
 10. Suits brought, disposed of and still pending.
 11. List of feed stuffs, manufacturers and brands.
 12. Financial statement.
 13. Supreme Court decisions.
 14. Forms of indictment.
 15. Bulletins issued since July 1, 1907.
 16. Instructions to inspectors.
 17. Tentative Food Standards.
 18. Rules and labels.
 19. New Revised Illinois Dairy and Food Law of 1907, as amended in 1911.
 20. Oleomargarine Law.
 21. Stock Food Law.
 22. National Food Law.
 23. Index to report.
- All of which is respectfully submitted.

ALFRED H. JONES,
State Food Commissioner.

GRAPE STORAGE EXPERIMENTS.

Secretary Wilson calls attention to the very important advance accomplished this season in the progress of the table grape storage experiments being conducted by the Bureau of Plant Industry of the Department of Agriculture. Two carloads of Red Emperor grapes were packed and shipped by Mr. George C. Roeding of Fresno, California, for holding in cold storage in accordance with the results of the Bureau investigations with a view of testing the commercial application of the work. The sale of these grapes occurred last week in New York and Chicago, where the fruit has been in storage for over two months, and very satisfactory prices were obtained, averaging \$2.57 per drum or from 8 to 9 cents per pound.

The Department grape storage investigations were begun six years ago with two objects in view: A study of the factors which affect the keeping qualities of table grapes while in transit and in storage and the possibility of extending the marketing season of California grapes by holding them in cold or common storage with a view to the possible replacing of the imported fresh Spanish grapes with the California product. The importations of fresh grapes from Spain during the present season amount to nearly 900,000 barrels which have sold at wholesale prices ranging from \$2.50 to \$7.00 per barrel, or from 5 to 15 cents per pound, the bulk selling at the lower price. Under ordinary conditions, most of the California table grapes must be marketed within a period of a little over two months and early attempts to hold them in storage for the holiday markets did not prove entirely successful.

The Bureau investigations have shown the importance of handling grapes with care to insure their being packed in sound condition. It has also been found that it is impossible to hold the varieties of grapes that are commercially grown in California any appreciable length of time without a filler of some kind. The Spanish grapes are packed with a filler of ground cork. As this material is both scarce and expensive in California, special efforts were made to obtain a satisfactory substitute. Many different materials were tested, but only one has thus far proved wholly satisfactory. This is

redwood sawdust, which is a waste product of the California sawmills. Much to the surprise and gratification of the Department investigators, this material has proven even superior in many ways to the ground cork. It is found that the grapes hold longer and in better condition when packed with the redwood sawdust. Great pains have been taken to corroborate the results and the data have been consistent throughout. It was necessary to learn how to prepare the sawdust in order to have the grapes remain in attractive and salable condition. The sawdust must be perfectly dry and the finer particles must be removed.

A number of varieties have been under investigation, and naturally their behavior under storage conditions has been different. Of the varieties grown in commercial quantities, Red Emperor, Malaga, and Flame Tokay have been found to hold best in storage. The length of time which these varieties may be held vary from 60 to 70 days for the Flame Tokay and Malaga, and from 90 to 110 for the Emperor.

In the commercial test of the application of this work during the present storage season the grapes were packed in drums holding about twenty-seven pounds, and the work of packing and shipping was done largely under the supervision of one of the Bureau representatives. The drums were forwarded from California to Chicago and New York under refrigeration where they have been held at a temperature of 32 degrees in cold storage. The Emperors have proved to be the best for storage purposes and form the bulk of the grapes sold for the Christmas trade. The best grapes of Flame Tokay may be held until Christmas, but the ordinary run of this variety will not hold in first-class condition beyond December 1st. The Malaga varies considerably in its behavior in storage, depending upon the conditions under which it is produced. Some lots of this variety have been held in first-class condition until January 1 in past years, while others are not safe beyond December 1.

The value of this work to the grape industry of California is apparent when the full significance of the extension of the marketing season is appreciated. The production of table grapes in California is increasing and unless some way can be found either to broaden the area over which the fruit may be distributed, or to lengthen the marketing season, the industry will be face to face with a serious problem of over-production. When it is considered that this country uses large quantities of imported grapes, the demonstration of the possibility of replacing the foreign product by one home grown is worthy of the most strenuous effort.

The possibilities of packing California grapes with the redwood sawdust filler for export are also recognized and efforts are being made to extend the marketing area by this means. A small test shipment of California Tokay grapes shipped to England was made during the past season and the fruit arrived in excellent condition. The sawdust pack in drums is well adapted to ocean transportation, because the necessarily rough handling in loading and handling aboard does not affect the grapes when packed in this way, while the ordinary open crates are too weak to withstand rough handling, and in addition the grapes deteriorate during a long trip unless a filler is used.

It is expected that a considerable number of carloads of grapes will be packed for storage next season.

COMMISSIONER MAKES A DISCOVERY.

"Many restaurants in Chicago are serving a product known as 'syntho' in place of cream," said Health Commissioner Young of Chicago in a newspaper interview recently. "The product is palatable and wholesome, but it is not cream. It bears about the same relation to cream as oleomargarine does to butter."

"Inspectors who visited twenty restaurants in the downtown section found sixteen of them substituting it for cream. Analysis showed samples to contain beef fat, which is not an element of cream. The product is made from skim milk, beef fat, gelatin and other substances, and it is a fraud to sell it as cream."

TO HAVE EXHIBIT OF NORTHERN FRUIT.

Montreal will probably be the scene of a national fruit exhibition on the same scale as marked the national apple show in Vancouver a couple of years ago and the exhibition given in Seattle.

It is proposed that an exhibition of what is regarded as Canada's national fruit, the apple, shall be held there in November with exhibits from New Brunswick, Nova Scotia, Ontario, Quebec, British Columbia, and all the other apple growing districts of Canada.

Food Inspection Board Displays Ignorance of Law

From a Staff Correspondent.

WASHINGTON, January 10, 1912.

How long can the condition now prevailing in the Department of Agriculture with regard to the food and drugs act continue? Men who know something about the theory of the American form of government and an appreciation of the fact that in every organization the head of it must have assistants in whom he can have confidence have been asking the foregoing question for many days.

Dr. Wiley has been the head of the so-called pure food branch of the department's work for three months. During that time he has not produced one food and drug inspection decision that he could approve without writing himself down an ass devoid of a particle of appreciation of the theory that Congress legislates and that the only duty of the executive branch of the government is to enforce what Congress has enacted.

There are ten or eleven tentative food inspection decision orders before Secretary Wilson awaiting his action. Attaching his signature to one of them would be equivalent to writing himself down a fool or a knave willing to bamboozle the American people into believing they had something which no court in the land would tolerate more than long enough to throw it into the trash heap.

Take, for instance, the mincemeat order prescribing a standard recipe for making it. Where in the law is there authority for saying it must have not less than ten per cent of meat? It is true the other merely states that the government will deem to be misbranded anything that is called mincemeat that does not contain that percentage of comminuted meat. But the statute was intended to merely prevent deception, not prescribe a standard for the regulation of ingredients. Where is the consumer that would be deceived if his mincemeat contained only five per cent of meat? If he had any comment to make on the matter at all it would probably be to the effect that the maker was mighty stingy with his meat. He might think that because his mother used a great deal of meat, while somebody else's mother used even less than the aforementioned stingy manufacturer. The pie-eating public knows as little about the ingredients of mincemeat as it does about congeners.

Every teetotaler in the land agrees with the tentative decision with regard to absinthe, that it is "dangerous to health." If there are any absinthe makers in the United States they will agree that it is a righteous order, one which should be strictly enforced. Without doubt, also, all the Frenchmen who use sulphur dioxide in their products agreed that that was a righteous agreement entered into by Dr. Wiley, Ambassador Jusserand and Secretary Knox, which, had it been enforced, would have had the result of allowing the French products to come in but kept the American products of exactly the same sulphur content from moving from one state to another.

Presumably, if Drs. Wiley and Doolittle came to the conclusion that alcohol in any and all forms are deleterious to health, there will be no more interstate transportation of wine, beer, whiskey or brandy—un-

less of course it bears the green stamp which covers the kind of whiskey that is made chiefly by distillers members of a \$30,000,000 corporation which some people are so unkind as to call the whiskey trust. The green stamp, inferring from some of Dr. Wiley's assortment of utterances on what is whiskey, would render alcohol in that form absolutely harmless.

But it is the tentative decision with regard to opium that is the finest product of the new Food and Drug Inspection Board. Lawyers may think it the essence of presumptuousness because Congress, some years ago, refused to pass a bill which would have placed the trade in habit-forming drugs on the footing the board had decided the trade in opium and other things made from the poppy shall have. Congress is to be severely censured for not having passed the Mann bill. That body has often refused to pass wholly meritorious measures.

It is somewhat of a joke on the Hon. James R. Mann, who is a lawyer and a doctor, that he thought it necessary to have Congress pass a bill of that kind to have the trade in habit-forming drugs brought to a proper basis. It is assumed that when he introduced the bill he had such a thought. If he had worked harder on his studies in chemistry, he might have learned that such an act is wholly unnecessary.

The Supreme Court, in so many cases that mere citation of them would probably fill this whole page, has decided that administrative officers, under pretense of enforcing a statute, must not go beyond the limits set by the act itself. In nearly every case taken to the courts to have orders of the Interstate Commerce Commission set aside, the ground of attack is that the commission, made up wholly of lawyers, except one man, went beyond the scope of the act to regulate commerce. In the greatest case under that act, the maximum rate case, so-called, the highest tribunal in the land held that, while it would be all right for Congress to give the commission the power to say what would be a reasonable rate for the future, as a matter of fact Congress had not done so.

It may be that Drs. Wiley and Doolittle, being excellent chemists, at least for the purpose of this discussion, have been able to so read the label clause of the food and drugs act as to convince the Supreme Court that Congress intended and did give to the Secretary of Agriculture the power to regulate interstate transportation of habit-forming drugs; that it did vest discretion in the Secretary of the Treasury to say that while opium is deleterious to health and therefore not subject to entry at the ports of the United States, he would disregard the prohibition and admit it if the importers did certain things, the wholesalers did something else and the retailers did something of the same character, that something being the filing of a report of every sale with the Secretary of Agriculture.

To be sure, lawyers, even lawyers not retained by "food dopesters," on the spur of the moment, can think of so many cases in which the Supreme Court has declared the law to be exactly contrary to what is proposed in the tentative decision, as to make

their heads swim. But what are they in comparison with the great legal mind that came to the conclusion that three subordinates of the Secretary of Agriculture can do what Congress refused to do? It is a situation calculated to make men who think they know something about the meaning of the constitution rub their eyes and wonder how they could have deluded themselves into thinking that there is no power in the United States that can make up for the deficiencies of the Congress of the United States.

That the legal aspects of the matter have been thoroughly considered in the Bureau of Chemistry cannot be truthfully gainsaid. Many letters have been sent out to objecting manufacturers who caused their lawyers to protest against what they deemed to be the illegal acts proposed by the board. In those letters this language has been used:

"The legal aspects of this matter have been thoroughly considered and if there is any question as to the jurisdiction, it will be settled in the courts."

Without desiring to be discourteous to Secretary Wilson, it may be suggested that when he asks the Attorney General of the United States to begin prosecutions under some of the tentative decisions, the chief law officer of the government will probably advise him that before he tells a man the question will be settled in the courts, he had better ask the law officers, without the help of whom he could not get into court. It is one thing for a bureau chief to decide that he will begin prosecutions under what he deems to be the law of the subject, but something entirely different to persuade the law officer to make himself the laughing stock of the whole fraternity by going into court with a proposal, which, in effect is: "Yes, Congress refused to enact the Mann bill but we have the power to make administrative regulations that will do everything that bill would have done had it been enacted."

That is the position the Attorney General would have to take assuming the case ever got to the Supreme Court of the United States. The lawyers on the other side would set up the fact in their argument and the Attorney General of the United States would have to answer in his brief.

Without doubt it is a question of physiological chemistry as to whether opium is a deleterious substance. The question as to whether the Secretary of the Treasury can prescribe conditions under which an article deemed to be so harmful may be admitted to the United States is not within a million miles of the most erudite work of chemistry ever written.

There is no question but that Congress can shut out opium. Congress can shut out anything and everything. That question was settled in the time of the embargo act. Congress forbade the transportation, from one state to another, of lottery tickets, and the Supreme Court upheld it. Congress can prescribe the conditions upon which opium may be admitted to the country and transported from one state to another. Under pretense of raising revenue, it can prescribe the exact conditions under which sales may be made, as is done in the case of alcoholic liquors and tobacco, but is the Secretary of Agriculture or his three subordinates, the members of the Food and Drug Inspection Board, in the enjoyment of any such power?

Really the proposal is so ridiculous that terms to aptly describe it would require weeks of research. President Taft would be warranted in dismissing Secretary Wilson from the cabinet if he signed such an order. Had it not been for the hullabaloo raised by

the sinister forces backing Dr. Wiley, Secretary Wilson, ere this, would have turned to Solicitor McCabe for advice as to the limitations placed on him by the constitution and the law as declared by the Supreme Court. As things stand now, he will have to ask the advice of either Attorney General Wickersham or one of his assistants. While Bonaparte was Attorney General it might have been possible to have obtained an opinion from the Department of Justice approving the proposal, because during the regime of the scion of the Bonaparte family things were done there that were more ludicrous than took place in the empire under the little Napoleon. Even now some messenger in the department might be induced to give an opinion that the proposed order might stand the test in the courts.

Then there is the proposed order forbidding the shipment of oysters that have been floated. That is not one of the absolutely ridiculous orders because it may be that floated oysters are in and of themselves "dangerous to health." The order it is intended to displace merely requires that when oysters have been floated in clean water, the fact be set forth on the label, so that the consumer would know that he was being cheated if he bought them; that they were not really as fat as they appeared to be. The secretary might be able to enforce such an order. The same is true with regard to others.

But what of all the 3,000 cases of violations of the law held in abeyance by the old board? The folks who attended the hearings before the Moss committee certainly got the impression that if the benevolent looking doctor could but get his hands on them, dope, benzoate, salicylic acid, and possibly some fur would fly and fly immediately! Not one of them has been dragged out. The cases were held in abeyance either because the material evidence had become so stale as to be of no value, or because the violator of the law had reformed, either of which is sufficient reason for an honest prosecuting attorney to say he will not ask a court to listen to a case that would have to halt and limp along to an acquittal because the government's witnesses could not convince the jury that any law had been violated.

The assertion that is being made by Dr. Wiley in his letters that the legal aspects of the matter have been fully considered and the question of jurisdiction will be tried in the courts, is probably intended to frighten those to whom it is made. If the doctor could find a district attorney to prosecute a case, always assuming that Secretary Wilson would sign the necessary order, he could make it expensive for manufacturers to defend themselves. Everybody with any experience knows that it is costly to win a victory in the courts, especially when the other side is backed by nearly all the money in the United States treasury.

If President Taft had the gumption he would call for the tentative decisions made by the chemists, look at the law proposition contained in them and then start a revolution in the Department of Agriculture that would convince bureau officers, whose only possible duty in the courts could be to act as witnesses, that construing the statutes is not one of their duties. It is an intolerable condition that has been built up in the Department of Agriculture through Wiley's platitudinous lectures, the press agent work of the "straight whiskey" people and the "holier than thou" food manufacturers.

The Democratic members of the House are begin-

ning to understand that Moss, chairman of the committee that investigated the so-called Wiley-McCabe row, has been hooked in by the faction that is trying to literally put out of business everybody who disagrees with its leaders. That is why there has been no report from the Moss committee, although one has been reported as being nearly ready every day,

almost, since the beginning of this session of Congress. They are beginning to know that Dr. Wiley, by the testimony of Secretary Wilson, was indirectly accused of perjury, and that if a report censuring Wilson were brought in, some Democrat might ask why there has never been any inquiry into that accusation.

Survey of the Food and Drug World

Politics in Food Control.

As one step toward co-operation between state pure food officials, Dr. S. J. Crumbine, Chief Food Inspector of Kansas, has sent to the chief food officers of all the other states, a copy of the examination questions used in the recent civil service test to pick out the best man for appointment as drug inspector. He says, in his letter which accompanies the list of examination questions:

"Inasmuch as the Association of State and National Food and Dairy Departments has, on a number of occasions, recommended that the office of food and drug control officials be removed from politics, and that appointments for commissioners be based upon merit alone, the chairman of the committee on co-operation, speaking only for himself, is of the belief that such action will be more quickly and more certainly brought about by each commissioner first taking his own department out of politics and having the appointments of inspectors made on a basis of merit rather than on political faith.

"The division of food and drugs of the Kansas State Board of Health some time ago recognized this principle and recently held an examination to fill a vacancy in the drug inspection force. Believing this to be in the nature of advanced legislation, and the practical way to bring about the elimination of politics from the food and drug control work, the examination questions used at the recent examination are herewith submitted for the information of commissioners.

"It might be of interest to add that out of the eight applicants, two made a passing grade of 70. The highest-grade man is appointed and the other one passing is put on the eligible list for appointment within one year should a vacancy occur. After this time, new examinations are required."

Butter Firm Buys Dirt for Butter.

The B. S. Pearsall Butter Company of Elgin, Ill., recently paid \$600 for 40 tubs of dirt. Of course the company bought the dirt for butter. The bill of lading came Tuesday morning, accompanied by the usual draft for the amount. The receipt of the Northwestern railroad for the shipment showed "forty tubs of butter" and the draft was forthwith honored. G. A. Barnes, expressman, took the bill of lading and took the shipment to the factory. One of the tubs cracked and a stream of dirt poured out. Investigation showed that every tub was filled with dirt.

According to officials at the butter company's office, the shipment was bought through a broker from whom the company had purchased one small shipment once before. The butter was supposed to have come from Iowa.

Mr. Pearsall sent a telegram to "J. E. Gibbs, 189 Fourth Ave., Kankakee, Ill.," from whom the shipment was purchased and received a reply that no such man as Gibbs was shown at the address and that the postoffice had no record of such a person.

The swindle was easy to work, according to Mr. Pearsall. "Like hundreds of other butter manufacturers," he said, "I advertise that I will buy butter in any amount for a certain price from anyone, agreeing to honor the draft for three-quarters of the amount on receipt of the properly receipted bill of lading. I do not know anything about a great many of the people who send butter to me. When the bill of lading comes, properly receipted by the railroad company and accompanied by the draft, payment is ordered. No one questions railroad bill of lading. The railroad stands behind them, although the contents of the shipment are seldom investigated."

South Bend Has Few Good Food Establishments.

According to the *Times* of that city the year 1911 was a busy one with the city food inspection department of South Bend, Indiana, and the retail stores of the city were visited several times during the year.

During the year 839 groceries, 140 bakeries, 179 hotels, 188 confectionery stores, 372 meat markets, 132 drug stores, seven slaughter houses and seven dairies were inspected and classified as of their conditions. Few of these places were found excellent, most of them being in only fair condition.

Milk dealers came in for much consideration by the department and many samples of milk were collected and sent away for analysis. Several dealers were found guilty of selling dirty milk and paid fines. The work of sending samples of milk to Indianapolis is still being carried on, but prosecutions are not to be made until after the present agreement between the dealers and the health department comes to an end after January.

In 1910 320 groceries, 187 meat markets, 77 drug stores, 107 confectionery stores, 63 bakeries and 87 hotels and restaurants were inspected. Only five groceries, ten meat markets and 14 drug stores were found excellent. Not a confectionery store, bakery or hotel or restaurant was found to be in excellent condition.

Drug Trade Protests Tentative Opium Decision.

The annual meeting and the election of officers of the drug trade section of the New York Board of Trade and Transportation was held January 3rd at the Drug and Chemical Club in that city. Committee reports as well as reports of the secretary and treasurer were read and adopted. The following officers were elected for the coming year:

Chairman, Harry C. Levis, Seabury-Johnson Company; vice chairman, Samuel M. Moneypenny, National Aniline & Chemical Company; treasurer, William A. Haniman, Roessler & Hasslacher Chemical Company; secretary, William F. McConnell; representing director in New York Board of Trade, Adolph Hennig, Lamann & Kemp.

In the report of the committee on legislation a protest is made against the passage of a bill introduced in the House of Representatives by Congressman Richardson of Alabama, proposing amendments of a radical character to the Pure Food and Drugs act. A protest was also entered against the recent tentative food inspection decision regulating the importation and sale of opium, cocaine, morphine, etc., together with their derivatives and preparations. The chairman of the executive committee read correspondence with Secretary Wilson of the Department of Agriculture which led up to the recent decision requiring the advance submission to the trade of all proposed rulings. The committee on essential oils submitted a long report reviewing the situation during the past year. The committee on arbitration reported officially that Mayor Gaynor had decided to appoint a commission to take up the question of the establishment of official tares and tolerances for the city of New York in connection with the work of the Bureau of Weights and Measures.

Tomato Crop on Mexican West Coast.

The tomato crop from the west coast of Mexico began passing through the port of Nogales to United States markets in December instead of January 15, as was the case last season.

Almost all these tomatoes come from the valley of the Fuerte river, in northern Sinaloa. The exportation of tomatoes from this section during the shipping period last season amounted to 196 carloads, with a total weight of 4,289,619 pounds. The present acreage is 1,600 acres, as against 675

last season, and it is expected that the output will be doubled, the season's crop being estimated at 100 carloads. A carload contains from 1,000 to 1,200 crates. Arrangements have been made to rush these tomatoes to northern markets by special fast freight and pass them through the customhouse here without delay.

The entire crop is exported in the form of early ripe tomatoes, but a canning factory has been under consideration for some time. The farmers believe that with a canning plant easily accessible to the tomato fields it will add considerably to their revenue, as practically all of the canned goods consumed in Mexico are imported from the United States or Europe.

Chicago Grocers to Sell by Pound.

City Sealer Peter Zimmer of Chicago has sent out twenty inspectors to enforce the ordinance recently enacted by the City Council requiring that all fruits and vegetables be sold by weight instead of measure. The ordinance recently became effective.

Reports from these inspectors were to the effect that grocers generally throughout the city already have discarded measures. The only dealers who still cling to the old method are the hucksters.

The following table shows the number of pounds to the bushel in a number of fruits and vegetables:

Pounds.	Pounds.
Apples (green).....50	Corn (on ear).....79
Apples (dried).....24	Turnips .....55
Beans (green or string).....24	Onions .....57
Beets .....60	Peaches (dried).....33
Cranberries .....33	Peas (dried).....60
Spinach .....12	Parsnips .....55
Potatoes (Irish).....60	Carrots .....55
Potatoes (sweet).....55	

It is declared that the new system will result in an increase of 20 per cent in the purchasing power of a dollar for some commodities.

Factors Influencing Quality in Eggs.

Farmers and those handling eggs commercially, as well as the housewives and other consumers of eggs, will be interested in Secretary Wilson's remarks on two systems in vogue in the egg trade.

The system of marketing eggs in general use in the Middle West, known to the trade as the "case-count" system, has proven detrimental to quality. Briefly, case-count buying consists of the payment of the fixed price which happens to be current at the time for each and every dozen which may be offered for sale, regardless of whether the eggs themselves are good, bad, or indifferent. The only requisite in most cases to consummate a sale is for each egg to have an intact shell. No more practical step can be taken in improving quality than to discard this system of buying and replace it by the one known to the trade as "loss-off."

Where the "loss-off" system is in use the eggs as bought are "candled," that is, subjected to a test which shows quite definitely their condition and quality. By this test, it is possible to detect "rots," "spots," and other deteriorated eggs, such as shrunk, weak, watery, and heated eggs. In paying for eggs bought on this basis, the rots and usually the spots and blood rings are thrown out entirely, so that they become a dead loss to the person responsible for them. Such a classification and method of payment is a distinct step forward and results in a great improvement in the eggs.

Soldiers Making Money Raising Pigs.

Enlisted men of the coast artillery stationed at Fort Stevens, Ore., have demonstrated in a very practical manner the profit there is in raising hogs and in the handling of a vegetable garden. Beginning with eight hogs last spring, valued at approximately \$200, Quartermaster Sergeant Hocking of the Ninety-third Company has on hand at the present time thirty-five fat specimens, the average value of which exceeds \$30 apiece. In a period not exceeding eight months he has increased his assets to \$1,050. Of this sum less than \$50 was spent in providing feed additional to that obtained from table scraps, so that a conservative estimate places the profits to the company at 500 per cent in less than a year. Recently one of the older hogs was killed and found to weigh more than 600 pounds. At 12½ cents a pound, the present price for dressed pork in Oregon, the hog was worth \$75. The soldiers are quite elated over their farming experiments, and expect to start in on a much larger scale next season.

New Egg Law for Montana.

Strict regulation governing the sale of eggs forms an important part of corrective legislation adopted by the state of Montana, effective January 1.

The following is taken from the regulation becoming effective on the first of the year:

"Eggs shall be known as fresh eggs, ranch eggs and case eggs.

"Any eggs sold or offered for sale as fresh eggs, that are more than seven days old, shall be deemed misbranded.

"Under the title of ranch eggs, are eggs that have not been preserved or the age of which is unknown.

"All eggs that have been kept in cold storage, or that have been preserved in any way, shall be known as case eggs and the containers of such eggs must have plainly marked thereon in letters not less than two inches high the month and the year in which such eggs were placed in cold storage. Any eggs which have been preserved in any way which are sold or offered for sale without such label being plainly on the container, shall be deemed misbranded."

A severe penalty is provided for violators of the regulation following failure to comply with the terms of the law which requires the merchant or proprietor of an eating house to specify the class to which the eggs he is selling, belong.

New York Cold Storage Law Valid.

Justice Deuel, with Justices Mayo and O'Keefe, handed down on December 22d in the New York Special Sessions a decision supporting the constitutionality of the Brennan cold storage law and convicting the Greenwich Cold Storage Company of No. 402 Greenwich street of a violation of the provisions of the law. As the defendant was a corporation and a prison sentence could not be imposed, the alternative was the levying of a fine, which was placed at \$400. This is the first conviction under the law and establishes a precedent for the guidance of the courts in the future.

The trial took place in September and lasted two whole days, and the defendant corporation—the president also being prosecuted individually—attacked the constitutionality of the law. One point made was that in the case of wild fowl received for storage the law would require a separate tag for each prairie chicken, partridge, etc., and that the labeling of them would require an enormous amount of additional work.

State Rights in Food Legislation.

The spectacular contest which has been waged over the constitutionality of the Indiana pure food law of 1907 was on December 26th transferred to Washington, when the fight was renewed in the Supreme Court of the United States. The court is expected in this case to decide whether any state may enact legislation regulating food brought into a state from another.

Attorneys for Marion W. Savage filed with the court their reasons why the law should be declared unconstitutional. Their brief was submitted in a suit by their client to enjoin State Chemist Jones from enforcing the law. Savage claimed to be the owner and sole proprietor of a business known and conducted under the title of the International Stock Food Company, manufacturing in Minnesota a preparation for cattle and selling it in Indiana and other states. The United States Circuit Court for Indiana declined to enjoin the chemist from enforcing the law and Savage appealed to the Supreme Court.

One of the points urged against the law was that it constituted a regulation of interstate commerce, already regulated by the Federal food and drug act of 1906. It was urged that if the Indiana law was upheld that the merchant or manufacturer must comply with two standards, that fixed by the government and by the state.

Three Drinks a Day the Limit for Health.

Three drinks a day is the limit to keep healthy, according to the New York Board of Health. More than that it is declared means an untimely death from liver trouble or kindred diseases. The board declares that the increased death rate in cancer, liver trouble and heart disease "is due largely to lack of exercise, overeating, overdrinking and the luxuries of the automobile."

The report explains: "Heart disease and cirrhosis of the liver are often associated with the excessive use of stimulants. It is hard to establish any standard for what is excess, as there is a marked difference in individuals. Many physicians believe that a man is better off without spirits.

"Anything above three ounces of alcohol a day, which is equivalent to about six of whisky, or three drinks, is excessive."

Danish Butter Law Establishes New Moisture Standard.

In a recent issue of *Smør-Tidende* (Copenhagen) is the following:

"Certain sections of this bill took effect at once after the bill was passed (April 12, 1911), and now the bill will be in full force as from December 10. A government decree with particulars as to marking sale, and control, based upon the enactments of the bill, has just been issued, the principal provisions of which are that all the dairies shall partake in the butter shows, and all butters be subject to examination in the ports of shipment, and if any butter is found below a certain standard of firmness, the dairy can temporarily be deprived of the right to use the Lurbrand. Butter with contents of water over 16 per cent up to 20 per cent shall be sold under the name of 'Water Butter.' Rules for the marking and sale locally of such 'water butter' are given. Butter with more than 20 per cent of water must not be sold at all."

Big Milk Concern Formed.

William A. Graustein, A. H. Graustein and A. E. Cole have incorporated, under the Massachusetts laws, the Boston Condensed Milk Company, with \$900,000 capital, divided into 4,000 first preferred, 1,000 second preferred and 4,000 common, par \$100.

There is to be issued 298 shares 7 per cent first preferred, 997 7 per cent second preferred and 2,998 common, and the corporation is to start with surplus of \$25,000, under a contract between the company and Oscar R. Lang, under which there is to be conveyed to the company all the assets of the Boston Dairy Company for stock of new company, and the assumption by the Boston Condensed Milk Company of all liabilities of the Boston Dairy Company. Of the property of the Boston Dairy Company all but \$25,000 in value is to be taken in payment for an aggregate of \$429,300 par value of Condensed Milk Company stock.

Dates of Dairymen's and Buttermakers' Meetings.

Following are dates of meeting in January and February of various dairymen's and buttermakers' organizations:

Pennsylvania Dairy Union, Pittsburgh, Pa., January 15 to 20. H. E. Van Norman, secretary, State College; Illinois State Dairymen's Association, Effingham, January 16, 17 and 18. George Caven, secretary, 136 W. Lake street, Chicago; Minnesota State Dairymen's Association, Wadena, January 16 to 19. F. D. Currier, secretary, Nicollet; Iowa Buttermakers' Association, Mason City, January 23, 24 and 25. J. J. Brunner, Strawberry Point; Wisconsin Buttermakers' Association, Green Bay, February 6 to 9. G. H. Benkendorf, secretary, Madison; North Dakota Dairymen's Association, Mandan, February 15 and 16. R. F. Flint, secretary, Bismarck; Michigan Dairymen's Association, Kalamazoo, February 19 to 22.

Sugar Refinery to Be Reopened.

The Pennsylvania Sugar Refining Company's plant in Philadelphia will be operated for the manufacture of sugar about April 1, according to reliable information. A corporation known as the Keystone Sugar Refining Company has been formed to run the refinery. M. R. Spelman, a retired sugar manufacturer, formerly president of the Colonial Sugar Refining Company of New Orleans, has been chosen to head the new corporation. The organization of the Keystone Sugar Refining Company will take place January 22, by which time all legal forms will have been complied with. Under Mr. Spelman's management the refinery is expected to produce about 4,000 barrels of sugar daily, which is given as its capacity.

Court Thinks Selling Oleo for Butter Contemptible.

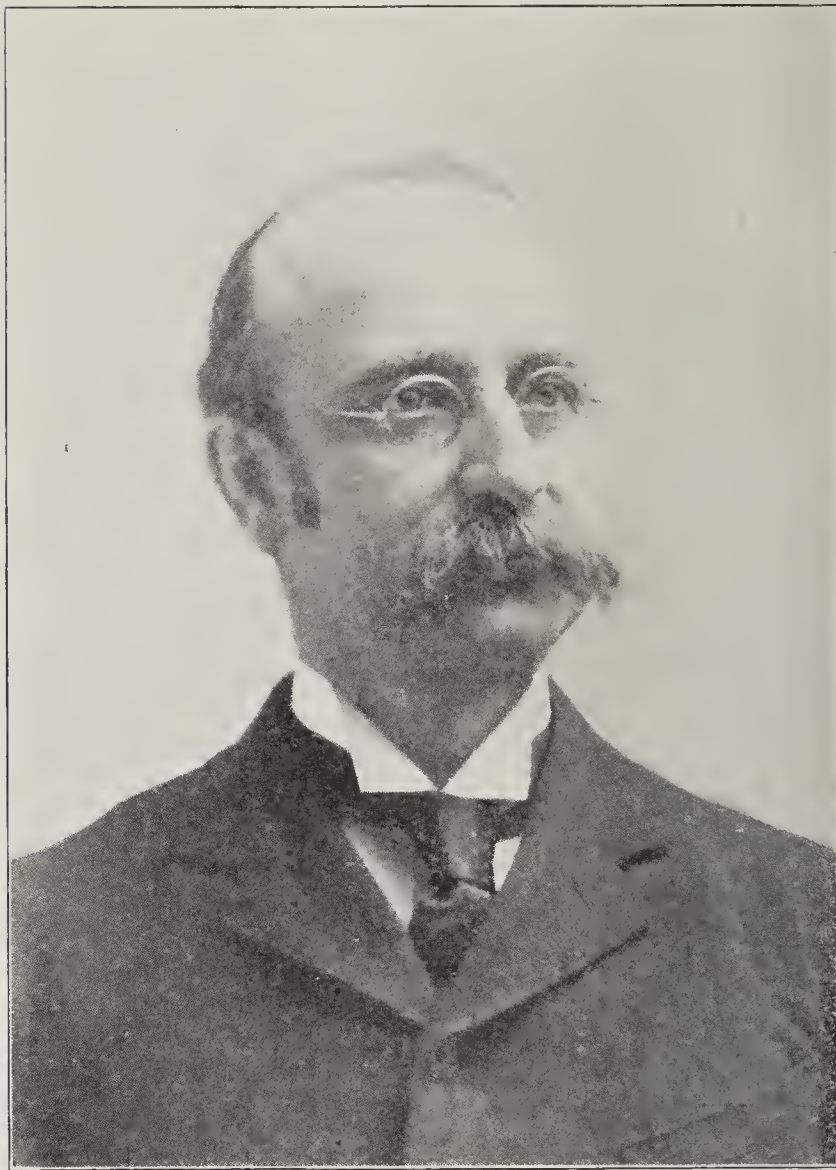
George Fredericks, of 546 West Fortieth street, New York, pleaded guilty December 27 before Justices Forker, Zeller and Fleming in Part V of Special Sessions to a charge of selling oleomargarine for butter. He was fined \$100 upon his plea of guilty, with the alternative of thirty days in the city prison.

"I disagree with my colleagues in imposing this sentence," said Justice Zeller. "It is a dirty and contemptible trick for a dealer to sell oleomargarine under the name of butter, and I think that any person who so violates the law should be given a straight prison sentence. I would be in favor of giving this man no alternative than that of a sentence in the city prison."

DR. WHITAKER TAKES NEW POSITION.

Dr. George M. Whitaker has resigned from the Department of Agriculture to take up the duties of Secretary and Executive Officer of the National Dairy Union, to which office he was elected at the last annual convention of the organization held in Chicago during the progress of the National Dairy Show in October last.

Dr. Whitaker has been head of the Market Milk Section, Dairy Division, Bureau of Animal Industry of the Agricultural



DR. GEORGE M. WHITAKER.

tural Department for a long period, and his retirement from that position is understood to be in the nature of a furlough. On the completion of his term of office with the National Dairy Union he will be welcomed back to the Department of Agriculture. The change took place on January 1st.

Dr. Whitaker began his official career as a young man with the State Board of Health of Massachusetts, in charge of the enforcement of the dairy laws of that state. He has been in dairy work as an official a good many years, and his experience has given him peculiar fitness for the exacting duties of his new position.

ICE CREAM MEN TO MEET IN CHICAGO.

The National Association of Ice Cream Manufacturers will meet in annual convention at the Congress hotel, Chicago, January 17th, 18th, 19th and 20th. About 400 delegates will be in attendance. This convention had been set for January 15th at Dallas, Texas, but owing to an epidemic of cerebro-spinal meningitis in that city it was moved to Chicago and new dates set. It is denied that Dr. Wiley of the Bureau of Chemistry will be one of the speakers.

MEAT PACKERS' CONVENTION.

The American Meat Packers' Association is in convention in Washington, D. C., its deliberations to continue from January 15th to 17th. About 800 delegates are expected to be in attendance. Canada, Mexico and several European countries will have representatives. Secretary of Agriculture Wilson and many of the scientists connected with his department will speak.

What the Courts Decide on Food Prosecutions

CONFECTIONERS WIN A MINNESOTA TEST CASE.

On December 8, 1911, the Supreme Court of Minnesota handed down a decision on the right of the State Food Department to arrest traveling salesmen for taking orders for foods illegal under the Minnesota food law.

Several months ago the department began prosecuting the traveling salesmen of prominent manufacturing confectioners, located outside of Minnesota, on charges of taking orders for confectionery which when shipped to the customer were found to be colored with coal tar colors. The law of Minnesota prohibits the sale of candy colored with coal-tar colors.

The National Confectioners' Association contested the right of the state to arrest such traveling salesmen in the case of the State vs. J. F. Gruber, a salesman for the O. T. Stacy Co. of Rochester, N. Y. Gruber was convicted in the lower court in St. Paul and the confectioners appealed to the Supreme Court of Minnesota. The case was handled for the confectioners by their counsel, Thomas E. Lannen of Chicago, and Hon. Frank C. Brooks of Minneapolis, and for the state by Hon. George T. Simpson, O. H. O'Neill, Lyndon A. Smith and John Burns.

The opinion of the court is as follows:

OPINION OF JUSTICE BURN.

"This is an appeal from a judgment of the municipal court of St. Paul adjudging defendant guilty of wrongfully, unlawfully, and wilfully selling to Mrs. R. B. Superior, in St. Paul, confectionery which contained coal-tar dye, in violation of Section 1767, R. L. 1905. This statute is as follows: 'No person shall manufacture or sell adulterated confectionery; and confectionery shall be deemed adulterated if it contain terra alba, barytes, talc, coal-tar dye, or other poisonous or injurious coloring matter, or any poisonous or injurious flavoring matter, or any substance injurious to health.' The facts were stipulated. Defendant resided at Elmira, N. Y., and was a traveling salesman of the O. T. Stacy Company, a corporation under the laws of New York, having its place of business in Rochester, in that state. All of the officers of O. T. Stacy Company live in New York, its business is the manufacture and sale of confectionery at said city of Rochester, and it has never maintained any office or place of business in Minnesota. On August 23, 1910, defendant in the regular course of his employment as such traveling salesman called upon Mrs. Superior in St. Paul, and solicited and obtained from her an order for certain confectionery. He did not exhibit samples of the confectionery ordered, but stated that the color of said confectionery would be pure. He then wrote out the order upon a blank form of the O. T. Stacy Company and forwarded it to such company at Rochester, N. Y. Defendant acted solely in the capacity of a traveling salesman for O. T. Stacy Company. He had no authority to accept the order, but took it subject to acceptance or rejection by said company, when received at Rochester. He had nothing further to do with the transaction after taking and forwarding the order, and no personal knowledge of when or how such order was filled or shipped.

"September 4, 1910, Mrs. Superior received from O. T. Stacy Company certain confectionery in fulfillment of said order. This confectionery was shipped by rail by said O. T. Stacy Company from Rochester, N. Y., direct to Mrs. Superior, at St. Paul. Before such shipment, it was packed in twenty-nine pasteboard boxes, and these boxes were packed in one wooden box, which was securely nailed, and consigned as one package to Mrs. Superior. When received the merchandise was in the original pasteboard boxes and in the original wooden box, which were in the same condition as when shipped. The confectionery, at the time of the shipment and when received, contained coal-tar dye which had been employed to color said confectionery. The final paragraph of the stipulation of facts is as follows: 'Certain coal-tar dyes are poisonous and injurious to the health of those who eat the substances colored by them. The Federal government has held that the use in food, for any purpose, of any coal-tar dye except certain coal-tar dyes mentioned by name, will be grounds for prosecution under the pure food and drug law of June 30, 1906. One of the coal-tar dyes excepted from the general class and condemnation of coal-tar dye is a certain coal-tar dye described as "Orange Shade, No. 85," and defined as "Orange 1"; that the confec-

tionery shipped as aforesaid to Mrs. R. B. Superior and ordered by her of O. T. Stacy Company, through J. F. Gruber, defendant, as hereinbefore stipulated, was colored by said coal-tar dye last described, to-wit "Orange Shade No. 85, Orange 1," and not otherwise.' No evidence was received or offered, except as embodied in the stipulation of facts and necessarily our decision must be based on such stipulation.

"(1) R. L., Section 1767, forbids, and R. L., Section 1775, makes criminal, a sale of confectionery which is colored with coal-tar dye. Of course, it is a sale within this state that is made an offense. The Legislature could not and did not prohibit a sale outside of the borders of this state, or make such a sale a crime under our laws. Nor does the law forbid the shipment of such adulterated confectionery into this state. It follows, then, that the first question presented for our consideration is whether the sale of the confectionery in question was made in this state or in New York. It appears from the stipulation that defendant took the order and forwarded it to O. T. Stacy Company in New York. It was subject to be rejected or accepted by O. T. Stacy Company. There was no sale and no contract until the order was accepted. O. T. Stacy Company packed the goods ordered, and delivered the same to the carrier in New York for shipment to Mrs. Superior. By so doing, it accepted the order, and the sale was then complete. It is the law that, where an order is given for goods and is accepted by delivery of the goods to a carrier for shipment with the intention of transferring the property to the buyer, the sale is governed by the law of the place of shipment. (35 Cyc. 94, and cases cited; *Bollinger v. Wilson*, 76 Minn. 262, 79 N. W. 109, 77 Am. St. Rep. 646.) In the *Bollinger* case an agent of the Schlitz Brewing Company of Milwaukee, Wis., had taken an order for beer from plaintiff, an Iowa dealer. The brewing company accepted the order and shipped the beer at Milwaukee to the dealer in Iowa. It was held that the sale was made in Wisconsin, and that neither the agent nor the brewing company could be convicted of selling liquor in Iowa contrary to the statutes of that state. Mr. Justice Mitchell said: 'Authorities to this effect are abundant.' If the O. T. Stacy Company brought suit against Mrs. Superior for the purchase price of the confectionery, and the latter defended on the ground that the sale was prohibited under the Minnesota laws, the plaintiff would necessarily prevail on the ground that the sale was made in New York and therefore not in violation of the laws of this state. The authorities are not only abundant, but conclusive. There is no escape from holding that the sale in question was made in New York, and therefore was not a violation of the statute of this state prohibiting the sale of confectionery containing coal-tar dye.

"(2) It seems to have been the position of the trial court, and to be that of the state, that defendant can be convicted of the sale because he aided or abetted in making it. It is quite impossible to see how a person can be guilty of aiding or abetting in the commission of a crime when no crime is committed. Had the sale been made in Minnesota, the statute would make a person who aided, abetted, or helped to bring it about guilty as a principal, and under this statute and a provision of R. L., Section 1775, making the doing of any act prohibited by the chapter prima facie evidence of an intent to violate the law, a conviction might be sustained. But when the act that is claimed to constitute the crime is done in another state, and particularly where it is not a crime in the state where it is done, persons in this state who counsel, aid or abet the doing of the act are no less innocent of any violation of our laws than is the non-resident who actually does the act. The cases where a man is shot, stabbed, or poisoned in this state and death occurs in another state are not in point. The ground of holding that the offense is committed in this state is that the acts which caused the death constitute the offense, and that the death is not the act of defendant committed in the other state, but the consequence of his acts committed in this state and against the laws of this state. (*State v. Gessert*, 21 Minn., 369.)

"(3) Nor can the act of defendant in taking the order be considered a part of the sale, so that it can be said that the sale took place in part within this state. The prohibited act was the sale, and that took place wholly in New York. Defendant, in helping bring about a sale in New York, was not violating a law of Minnesota. The case of *Strassheim v. Daily*, 221 U. S. 280, 31 Sup. Ct. 558, 55 L. Ed. 735, relied on

by the trial court, is far from being in point. In that case the crime was committed in Michigan, and the rule applied that the guilty party could be convicted in the courts of that state, though he had never been within its borders, providing, of course, that the state succeeded in obtaining jurisdiction of his person. If a resident of New York should commit a crime in this state, or aid in its commission, it is not doubted that the courts of this state could convict and punish him, if they could get him in their power; and it seems equally clear that, if a resident of this state aids in a violation of the laws of New York, he must be tried, not in this state, but in New York.

"(4) We therefore hold that defendant was not guilty of selling adulterated confectionery in this state, or of aiding or abetting in such a sale. This is decisive of the case, and we consider it unnecessary to determine whether confectionery colored with 'Orange Shade, Orange 1' coal-tar dye is a legitimate article of interstate commerce, or recognized as such by the Federal authorities. A decision on the interstate commerce feature of the case would be of small value, based, as it would have to be, on the peculiar facts disclosed by the stipulation.

"Judgment is reversed."

KEITH EGG CASE UP ON APPEAL.

The appeal of the Government to the United States Circuit Court of Appeals for the Third Circuit from the decision of the Federal District Court for New Jersey in what is known as the "Trenton egg case" came up on January 3rd at Philadelphia when arguments were begun to be heard.

In the original charge the Government claimed that the seized product, namely, 443 cases of frozen product, of the H. J. Keith Company, was "filthy, decomposed and putrid, and in that there had been substituted in part for it a certain substance, sugar." In the bill of particulars the charge that the product was either filthy or putrid was eliminated but alleged that "the frozen egg product in question contains bacterial organisms, some of which are of the gas-producing type, and that the same is in other respects decomposed and is unfit for use."

At the trial the Government stated that there was no question involved in the case as to the healthfulness of the product and the issues on which the trial proceeded were as follows:

1. Was the seized product decomposed—without regard to whether or not it was healthful, wholesome food?
2. Was it adulterated within the act because it was 90 per cent egg and 10 per cent sugar?

No claim is therefore made in the present appeal by the Government from the finding of the trial justice in favor of the claimant, the H. J. Keith Company, that the product was unhealthful or unwholesome, or that there was any fraud or deceit on the part of the Keith Company, or that the conditions at the packing plant were anything but cleanly and sanitary. The Government simply states that the product was "decomposed."

The brief submitted for the claimant appellee, the H. J. Keith Co., by Rounds, Hatch, Dillingham & Debevoise, its attorneys, argues that the Government failed to show that the seized product was decomposed in the ordinary sense intended by Congress in the Pure Food Law, and so decomposed as to be deleterious to health in its use. It is further claimed:

"The seized product is and was intended to be a mixed or compound article of food consisting of egg and sugar. It was manufactured in pursuance of a contract for egg and sugar under letters patent issued by the United States. The presence of sugar in a mixed or compound article of food intended to be egg and sugar does not render such article adulterated."

Under another point the position was taken that the act is a health measure, and that if it were not it would be unconstitutional, and also it was contended that while it is necessary that the Pure Food Board should protect the public against bad food it was equally necessary in these days of the high cost of living to protect it against the destruction of good food.

Arguing that the Government's experts failed to show that the seized product was decomposed, the brief recites the admission of Dr. Bacon that the product was not decomposed at the time he received it. The testimony of Dr. Jacobs, another Government witness, was met by a witness for the claimant, Miss Maria Howard, assistant professor of cooking at Simons College, Boston, who superintended the baking of cakes with the seized product by the claimant's witness, Morris, using the formula of Dr. Jacobs and also an ordinary

recipe for simple cakes, and brought them all into court while they were still hot. They were passed to the trial judge, who broke one open and smelled it; and testimony in regard to them was later introduced.

The testimony of the claimant's witnesses is summarized, namely, that of the lay witness from Topeka, H. J. Keith, who testified to the contract with the Waldorf Pound Cake Company, scientific expert witnesses and practical bakers.

The claimant appellee called the court's attention to the fact that none of the Government's witnesses said that any samples of the seized product or any cakes made from such samples were not edible, while all of the claimant's experts, technical and lay, who tasted the seized product, either in its frozen or melted state, stated that the product was good and all who tasted it after cooking said that it was edible, some using even more enthusiastic terms. On Dr. Stiles' own test, it was argued, the seizure was unjustified.

The brief further argued that the history of the Pure Food act, the objects to be accomplished by it and the language of all its provisions require that it should be so interpreted that in the case of confectionery as in the cases of food and drugs the Government should establish, with respect to products not specifically named, that they either deceive or are calculated to deceive the public or are detrimental to health, and as no proof was offered in this case tending to show that the confectionery in question was either deceptive or injurious the defendant was improperly convicted.

DECISION ON USE OF COLOR IN ILLINOIS.

The Food Commission of Illinois recently filed two cases in the Municipal Court of Chicago against the Sethness Company of Chicago for selling an imitation strawberry extract (and an imitation raspberry extract) artificially colored without declaring the presence of the color. The cases were tried in the Municipal Court on January 8th. The strawberry was labeled "Strawberry Ext. Imitation" and the raspberry was labeled "Raspberry Ext. Imitation." The charge made by the state was that the Sethness Company "did unlawfully have in its possession with intent to sell, offer for sale and sell a certain quantity of imitation strawberry extract, the same being an article of food, which was then and there adulterated in that it was colored in a manner whereby its inferiority was concealed, and it was made to appear better and of greater value than it really was." The Sethness Company contended that the word "Imitation" on the labels related to the color as well as to everything else in the product, and that it was unnecessary to state in addition to the word "Imitation" that the products were artificially colored. This contention was sustained by the court and the defendant was found not guilty in each case. The opinion of the court is as follows:

OPINION OF JUDGE BLAKE.

"I think the case at bar may be decided very rightly and properly by assuming that the act is constitutional and that the term food is, as defined in Section 7, the act says:

"Sec. 7. Term Food Defined. The term 'food,' as used herein, shall include all articles used for food, drink, confectionery or condiment by man or other animals, whether simple, mixed or compound, and any substance used as a constituent in the manufacture thereof."

"You notice by the act itself, that it does not intend to prevent the sale of imitations or substitutes. Imitations and substitutes are recognized as a proper article of commerce by the act. The section referred to in the proviso that an article of food which does not contain any added poison shall not be deemed to be adulterated.

"There is no evidence in this case that there was any poison or deleterious ingredient in the article in question here in this case. This second clause of the proviso expressly provides that articles may be sold when they are imitations, if the word 'Imitation' is upon the label. If the word 'Imitation' is upon the label, the article is correctly and properly an article of commerce unless it is poisonous or deleterious.

"The evidence shows here that there is a genuine article known as strawberry extract. This article is admittedly an imitation; it is so branded. It isn't calculated in any way to deceive anybody. Anybody buying it, knows he is buying an article that is an imitation.

The fact that it has certain coloring matter in it only adds to the perfection of the imitation. It does not change the fact that it nevertheless is an imitation. That seems to be the main point urged by the state in this case; that the coloring matter was used, and that it was therefore calculated to deceive. To deceive as to what? Not to deceive as to the kind of an imitation it was, because it was labeled imitation; not to deceive in that it represented the real strawberry ex-

tract, because it was labeled imitation and nobody could be deceived by that.

"I am certain there is no genuine product from my inquiry. I don't think that would change the reasoning of the matter. The imitation is allowed under the act. The act purports to regulate the sale of imitations, and that if the added ingredient is not poisonous or deleterious, but simply tends to make the imitation more perfect, it could not be complained of if it was labeled 'Imitation.'"

"The fact that it is artificial coloring and some of the witnesses say it should be brown doesn't seem to me would make any difference as long as it was labeled 'Imitation,' if it was not poisonous or deleterious.

"I think under those facts that the finding will have to be for the defendant."

SEEK TO ENJOIN PENNSYLVANIA COMMISSIONER.

Charges of conspiracy to ruin their business and of maintaining a press bureau, which circulates inflammatory, malicious and false statements against their products, are made in a bill in equity filed in the United States District Court for the Western District of Pennsylvania by the Robert F. MacKenzie Company, the Wuest-Bauman-Hunt Company of Cleveland, the New England Confectionery Company of Boston, Hawley & Hoops of New York, James E. Schaeffer of Baltimore, and Henry Heide of New York, all candy manufacturers, against State Dairy and Food Commissioner James Foust and his agents, in a bill in equity filed in the United States District Court January 2d. The bill is signed by Attorneys George H. Calvert, Charles B. Prichard and Thomas E. Lannen, for the plaintiffs, and asks for a preliminary injunction, restraining the defendants from further prosecutions of the petitioners until a later order of the court is made.

The petitioners in their bill of equity allege that Commissioner Foust and his agents, Archie Billings, E. P. Jones, P. J. Magee, John Jenkins, James McGregor and other persons, acting in conjunction with the Food Commissioner, have instituted a crusade not in good faith and not for the purpose of preventing and punishing real violators of the food act of May 13, 1909, but for the purpose of creating sensations and arousing distrust among those unfamiliar with the matters dealt with in the accusations, and for the purpose of gaining notoriety and giving prominence to the actions of Dairy and Food Commissioner Foust.

The bill further alleges that as a part of the general plan of crusade, the Dairy and Food Commissioner maintains a newspaper bureau for the purpose of sending out inflammatory and unfair statements as to the confections dealt in and sold in Pennsylvania and manufactured by the plaintiffs.

The petitioners ask that the defendants be restrained from bringing or causing any prosecutions to be brought against any of the plaintiffs or their customers for violations of the food act of May 13, 1909; from issuing or causing to be issued or giving any publicity by newspaper articles or otherwise, any inflammatory or misleading statements concerning the business of the plaintiffs and their customers in the state of Pennsylvania or about confectioners' glaze, or lac, or shellac, and from any other way of publicity charging that the use of the same is a violation of the act of May 13, 1909; from in any wise interfering with the sale of confections coated with confectioners' glaze or lac by plaintiffs or their customers, who are residents of the state of Pennsylvania, or from in any wise intimidating by threatening prosecutions; that the court declare the act of May 13, 1909, the food act of the state of Pennsylvania, to be unconstitutional and void by reason of alleged imperfections.

AN IMPORTANT LABELING DECISION.

A judgment has been recently handed down by Judge Austin S. Tompkins of the New York Supreme Court, which, if not reversed by the United States Supreme Court, will constitute a most important legal precedent.

Briefly stated, the case involved the labeling of salad dressing sold by one Olin S. Henderson of Orange county, which had been made by the firm of Farrington & Whitney, 376 Greenwich St., New York City. In spite of a clear provision in the state food laws covering and exempting the product in question, the official at Albany who referred the case to the State Attorney General's office for prosecution claimed that a list of the ingredients must appear on the label as specified in the law for "mixtures, compounds, combinations, imitations or blends" in the ordinary sense.

Before acquiescing to this dictum Farrington & Whitney consulted (in August, 1910) with Prof. R. O. Brooks, the

consulting food and drug inspection chemist, who advised them to contest the point and outlined the arguments substantially as follows:

The Commissioner who referred this matter to the Attorney General's office has evidently overlooked the fact that a salad dressing and the term salad dressing have become definite trade facts, that they are no more "compounds" (non-distinctive food mixtures requiring a statement of principal ingredients) than ice cream, tomato catsup, jellies or condensed milk. Chapter 524, Article XI, 165, first proviso under third misbranding clause, covers this point fully. Moreover the same clause reads "nothing in the act shall be construed as requiring proprietors or manufacturers to disclose their trade formulæ." As to viewing the food product in question as a mustard "adulterated" (?) with acetic acid, salt, etc., we beg to state that mustard is one of the least important ingredients from a quantitative standpoint and that no acetic acid (as such) is present. We hold that the term "salad dressing" hides no fraud of any sort, is distinctive, and that to require a listing of the ingredients as entirely unnecessary and illegal.

The proviso referred to in Prof. Brooks' letter (Chapter 524, Article XI, 165), reads as follows: "Provided, That an article of food which does not contain any added poisonous or deleterious ingredients shall not be deemed to be adulterated or misbranded in the following case: First, in the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food, under their own distinctive names, and not included in definition first of misbranded articles of food in this section."

"Definition first" referred to in the proviso reads: "If any substance or substances has or have been mixed or packed with it so as to reduce or lower or injuriously affect its quality or strength, so that such product when offered for sale shall deceive or tend to deceive the purchaser."

As Judge Tompkins states below there was no testimony or evidence that any standard salad dressing had been debased or imitated. Hence it was not an adulterated salad dressing in any sense and as a compound with a distinctive understood name, there was no call for a listing of the ingredients. (Supplementary opinion by Prof. Brooks.)

Mr. Dana T. Ackerly, of the firm of Breed, Abbott & Morgan, presented the case of Farrington & Whitney. Mr. William I. Dickerson appeared for the state. According to the report, the full influence of the Food Commissioner's department was brought to bear on the case as a test, and it was pointed out that "if successful the food commission could require such well-known 'distinctive compounds' as condensed milk, tomato catsup, plum pudding, prepared mustard, canned soups, etc., to be labeled with a list of ingredients."

The opinion of Judge Tompkins in full is as follows:

"The case was tried before the court without a jury by stipulation. The defendant sold an article contained in a bottle, labeled 'O'Donohue's Fifth Avenue Salad Dressing' and the plaintiff's claim is that there is a violation of the agricultural law in that the label did not state the ingredients of the bottle. *My opinion is that the ingredients are only required to be given where the article sold is an imitation or adulteration of some standard article of food* and that the burden is upon the people to show that the article sold is an imitation or adulteration of some article of food. There is no proof here that the article sold was an imitation or that it was in fact that there is some standard merchantable salad dressing and to bring it within the law requiring a statement of its constituent parts, it seems to me there should be proof showing that there is some standard merchantable salad dressing and that the article sold is not that article. So far as the proof shows it may itself be the standard salad dressing. The object of the law is to prevent deception and to forbid the sale of inferior or deleterious products without giving the public notice of just what is being sold. There is here no evidence of either. True, it does appear that the bottle sold by the defendant was a mixture of several ingredients, but that is not prohibited by law, unless sold as an imitation of some commodity or is injurious to the public health, and calculated to deceive the public. I do not see how the people's contention here can be upheld without requiring every make of salad dressing to be labeled with the ingredients thereof, because there is no proof of a standard salad dressing and there is no evidence that any ingredient of this salad dressing is unwholesome or foreign to true salad dressing. In fact no standard of true salad dressing was established, and I think the burden of proving that rests with the plaintiff."

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CLEARING THE ATMOSPHERE IN THE SACCHARIN CONTROVERSY.

At a conference on December 29th, the Secretaries of Agriculture, of the Treasury and of Commerce and Labor decided to extend the date of enforcing the prohibition of the use of saccharin in foods to February 1st. This decision followed a hearing at which representatives of the manufacturers of saccharin disputed the consistency of Food Inspection Decision No. 135, which purported to be based on the findings of the Referee Board of Consulting Scientific Experts, declaring saccharin to be an added deleterious ingredient when used in foods and prohibiting its use. It was urged that the Referee Board's report did not form a sufficient basis for the decision. The brief in which the representations of the manufacturers were made was printed in the pages of the AMERICAN FOOD JOURNAL last month, and that document is referred to for the manufacturers' arguments.

Much incorrect or garbled information in regard to the "saccharin controversy" has gone to the public through the medium of the daily press. It is impossible to say whether these publications have been inspired or countenanced in official quarters or not, but the fact remains that they have complicated the question and rendered a clear and untrammelled decision by the three secretaries difficult.

In reply to one editorial utterance on the subject, so misleading as to be intolerable, Mr. Warwick M. Hough, counsel for the Monsanto Chemical Works of St. Louis, one of the interested manufacturers, has written the editor as follows:

My attention has just been called to an editorial of yours of December 8th on "The Saccharin Controversy," in which you make the following statement:

"Saccharin is a poisonous product of coal tar, and its use in foods has been condemned by the Remsen Board, whose chairman, Dr. Remsen, discovered the drug back in 1879. A similar verdict has been rendered by scientific commissions representative of the principal nations of Europe";

and again,

"With saccharin, condemned by the highest scientific authorities as unfit for food, the case is quite different."

I am sure you do not wish to make any misstatements of facts, and I, therefore, call your attention to the fact that while saccharin is a coal tar product, the Remsen Board found that it was not "poisonous," and its use in foods was not condemned by that Board.

Furthermore, no scientific commission representative of the principal nations of Europe has ever found saccharin to be poisonous. There is no prohibition whatever upon its use in England. Germany prohibited its use in the interest of its beet sugar industry, from which it secures a large revenue, but not on the ground that it was poisonous or deleterious to health.

The only European scientists who opposed the use of saccharin as a sweetener for food were chemists in the employ of sugar interests.

The Remsen Board not only found that saccharin was not a poisonous or deleterious ingredient, but it furthermore found that the addition of saccharin to food in any quantity did not lower or injuriously affect or alter in any way the quality or strength of the food.

No clearer bill of health could be given any article entering into human consumption than was given to saccharin by the investigations and report of the Referee Board. It added to its report, however, the following statement:

"It is obvious, however, that the addition of saccharin to food as a substitute for cane sugar, or some other form of sugar, must be regarded as a substitution involving a reduction in the food value of the sweetened product, and hence a reduction in its quality."

This was an obiter dictum on the part of the Board, since it was not responsive to any question which had been submitted to it by the Secretary of Agriculture, nor is it a conclusion which is based upon any of the provisions of the food and drugs act; because there is nothing in that act which prohibits the mixing of two articles which would cause the mixed product to have a lower food value than it might have had, had the mixture consisted of other articles. This declaration of the Referee Board is not a scientific conclusion, but an obvious, or logical conclusion, as it states; but it has no bearing whatever upon the question as to whether under the provisions of the food and drugs act and the conclusions of the Referee Board, the use of saccharin in food should be prohibited.

When the use of saccharin in foods in the place of salt or sugar, or any of the other condiments, is declared on the label of the sweetened product, there can, of course, be no charge of surreptitious substitution, or deceit, or fraud.

The trouble with the present situation is that before the full report of the Referee Board was printed or made public, a regulation was prepared in the Bureau of Chemistry prohibiting the use of saccharin, which quoted only a part of the conclusions of the Referee Board, and this prepared prohibitory regulation was sent to the three secretaries for their signature, with the statement that it had been approved by the Referee Board as correctly interpreting their conclusions. This statement was not true, though the three secretaries when they signed the regulation prohibiting the use of saccharin believed it to be true.

I am an attorney representing a saccharin industry in St. Louis, and I have just returned from Washington where I have been endeavoring to convince the three secretaries named in the food and drugs act that they should modify their previous regulation prohibiting the use of saccharin, because such regulation is not in harmony with the findings of the Referee Board. I hope to be successful in this, but I have to complain most bitterly of the degree to which newspaper editors write on this subject without being fully informed of all the facts.

A great deal of false and erroneous information on the subject has been given out by Dr. Wiley, and he has been so thoroughly exploited before the country by press bureaus as the savior of the people, that they have been unable to observe his ulterior purposes, but have become disposed to accept any statement alleged to have emanated from him as absolutely true.

In this connection, I wish to remind you that sugar itself for more than a thousand years after it became known to Europeans, was regarded as a poison, and a drug, and extremely deleterious to health, and was used and sold only by apothecaries.

While it is no longer regarded as a poison, but rather as an article having considerable food value, practicing physicians who are eminent scientists state that sugar does more harm than any other variety of food, because of its tendency to ferment in the intestines before it has had time to be absorbed into the blood.

This tendency is productive of numerous diseases, including gastritis, enteritis and colitis. The excessive use of sugar invariably produces ill health and early death.

Suffering from the excessive use of sugar, there is nothing known to science which can safely supply the demand in humans for the sweet taste except saccharin.

The physician simply says, "Use saccharin instead of sugar," as he could say, "Eat red meats instead of white meats," or "Avoid all starchy substances." The sufferer does this so far as the use of a sweetener in coffee or tea is concerned, but it seems to me that he ought not to be tricked by having sugar surreptitiously added to the canned or prepared articles of food which he may use when he does not know that it is there. I have yet to find a single can of any kind of food which states on the label that sugar has been added.

When a man buys canned corn or peas, or pickles or what not, he is not expecting to get sugar, and he is not looking for food values which are to be found only in sugar.

A man ought certainly to have the right of making a choice, and those who wish to use saccharin as a sweetener are willing to have the statement appear upon the label in bold faced type that the article has been sweetened with saccharin, and not with cane sugar.

It is urged sometimes against saccharin that it is five hundred times sweeter than sugar, and that it is a cheap substitute for sugar. There is nothing in the law, or in economics, or in common sense for that matter, which proscribes the use of an article because of its cheapness.

It is sometimes charged against saccharin that it is a mineral substance, and that it has no food value, but it should be remembered that this is also true of salt and water and numerous other articles that enter into the composition of food, and that mineral matters of different sources are essential for use in forming bones and other body tissues for the repair of the body and for other purposes.

In referring to the conclusion which the Referee Board said was obvious, I assumed, for the sake of the argument, that a food to which cane sugar is added as a sweetener has a higher food value than the same food would have if sweetened with saccharin.

But this is not true in all cases. While sugar can be mixed with some articles of food with perfect safety, there are some cases in which the combination produces a dangerous poison.

Without going into this point in a lengthy scientific way in this letter, I quote a statement made in 1904 by one of the largest and most intelligent packers of canned goods in New England.

"It is necessary to sweeten canned corn somehow, because if it were to be processed without the addition of a little water, the extreme heat of processing—245 to 250 degrees for an hour—would scorch the contents of the can. The addition of water alone causes the canned corn to be flat in the taste, so, to bring it up to the natural sweetness of corn, sugar used to be added to the water, in proportion of 100 parts water, sugar 12 parts. This solution, when it comes in contact with corn, forms a dangerous combination, and the result is an acid fermentation which develops during the Spring and Summer after the goods have been canned—and this form of spoilage not only causes great loss of money, but it happens that the cans do not bulge at the ends, so one cannot pick out the bad cans until they have been opened. The result was that when a lot of corn was complained of as sour in this form, it had to be condemned—good and bad. Some seasons the loss has been as high as \$25,000 to a large packer.

"The use of saccharin in minute quantities in which packers of canned corn use it, has absolutely done away with this form of spoilage.

"A solution of water and saccharin equal to 15 per cent of sugar and 100 pounds water would be all that any packer would ever use."

Reports from Berlin state that the German and Austrian governments have taken steps looking toward the repeal of laws prohibiting the use of saccharin in foods. This action, it is said, is being taken because of the big shortage in the European beet sugar crop and in order to provide a cheap sweetening substance for the poorer classes.

Following is an extract from a leading pharmaceutical journal of Germany, the *Pharmazeutische Zeitung*:

From Austria we receive the information that there the initiative has been taken to repeal the saccharin law and to again permit saccharin to be imported duty free. In support of this attention is called to the shortage of the sugar beets and the necessity of providing a cheap sweetening substance for the middle classes.

Furthermore, the attention is called to the fact that the Government, using every effort, is unable to prevent the smuggling of saccharin. This paper recently stated that similar steps had been taken in Germany.

Mr. Francis E. Hamilton, of New York, who is the legal representative of a number of saccharin manufacturers, has sent a copy of the above extract to the three secretaries, together with this letter:

My Dear Sir.—I am enclosing you herewith extract from the leading pharmaceutical journal of Germany, the *Pharmazeutische Zeitung*.

You will note that this confirms my statements made before you that saccharin was prohibited in Europe not from questions of health, but entirely as an economic proposition.

You will also note that if it is to be allowed "as a sweetening substance for the middle classes" its use will have a decided influence upon the price of sugar.

This, on the part of Germany and Austria, is the correction of an error.

If the United States now falls into the same error, after the exhaustive examination made by the Referee Board of Consulting Scientific Experts and the arguments and briefs presented by counsel in this matter, resultant responsibility therefor will be far more serious than in the European countries, since now full knowledge upon the subject has been gained.

INSPECTION THE REMEDY.

The Bureau of Chemistry is making good on its threat to "go after" tomato catsup made from what is known as "factory waste." This threat is outlined in a news item appearing in the *Wholesale Grocer* of Chicago in September last, part of which reads as follows:

Catsup appears to have the Federal stage at the present time. Some months ago the government notified the catsup makers that a better grade of goods would be demanded this year. That the catsup of other days, made from cheap pulp tomato skins and cores, or unsound tomatoes, would no longer be permitted to go into interstate traffic. Nothing much was said about stock on hand, but as for the new catsup it must be made from sound tomatoes.

Some of the artificially colored catsup, so highly spiced as to cover up any bad taste or odor of decomposition, had already fallen under the ban. But the new order went further and warned all makers that much of the catsup that passed last year would not be allowed on the market this year.

Some of the states, taking their cue from the government ruling, are sending out circulars similar to that issued by the Federal government, notifying manufacturers and dealers what they may expect if their catsup does not come up to the standard. In other words there is a general movement being directed against the new catsup so soon as it shall come on the market.

The tendency to be extreme in such matters, which has always characterized the work of the Bureau of Chemistry, is quite pronounced in the present "crusade." Tomato catsup alleged to be made of "filthy, putrid and decomposed vegetable material" has been seized in large quantities in various parts of the country. Last month the AMERICAN FOOD JOURNAL noted that in the bulletin issued by Dr. A. N. Cook, Food Commissioner and Chemist of South Dakota, tomato catsup made by well known manufacturers was characterized as illegal because of the presence of mold filaments in a larger percentage of fields than is looked upon by the experts as proper. Tennessee also came out with a denunciation of various brands of catsup on account of the presence of mold filaments regarded as excessive.

The law says that food shall be regarded as adult-

erated "if it consist in whole or in part of a filthy, decomposed or putrid animal or vegetable substance," and the presence of mold filaments in more than twenty-five per cent of the fields examined microscopically or of a higher bacterial count than 25,000,000 per cubic centimeter is always declared by the government's expert witnesses in suits brought on charges involving this class of adulteration to be positive evidence that the material of which the catsup was originally manufactured fell within the prohibition of that clause of the act.

The pulp used in the manufacture of tomato catsup is in many cases admittedly the skins and waste from canneries. It is possible for this product to be utterly clean and free from unwholesome material. Not all of the tomato can be put in cans. If the tomatoes are clean, the skins and the other waste will be clean. The skins are an important element in the catsup, for they furnish the high color. The manufacturer who advertises that he uses clean, fresh, ripe tomatoes in his product uses the portions that the manufacturer using pulp made from cannery waste uses. He has to get the color. A further fact that should be considered is that the tomato used in catsup furnishes only flavor and a vehicle for the condimentary elements in the catsup. Tomato made into pulp and eaten utterly bland would not be a catsup. To be a catsup it must contain salt, vinegar, sugar and spices. The tomato vehicle furnishes a large percentage of the bulk of a catsup, but the condiments overshadow it in importance to the catsup character.

The presence of mold filaments and large quantities of bacteria in tomato catsup is better evidence of the changes that may have taken place in the product after processing than of the condition of the ingredients before manufacture. The presence of bacterial spores properly controlled by the condimental and other preservatives is no indication of unwholesomeness. Bacterial cultures from tomato catsups are sometimes evidence only of imperfect sterilization in the manufacture of the article.

The question of the percentage of mold filaments and of bacterial count in tomato catsup and in other products having tomatoes as a base or vehicle, determined after the manufacturing process has been completed, does not present much interest except to the overenthusiastic bacteriologist. The overenthusiastic bacteriologist seems to have the floor, on account of this academic interest largely, and in the Bureau of Chemistry on account of the impulse to impress the public with the bureau's importance and of certain persecutory tendencies heretofore noticed.

In the Keith egg case, now on appeal, the only contention of the government, as the case is presented by the bacteriologists, is that the eggs in question do not meet the standards of bacterial count established by them. The government does not contend that the eggs are unwholesome.

The true solution of the problem of detecting the introduction of filthy, decomposed and putrid animal or vegetable matter into foods lies in the establishment of an inspection system by which the condition of the ingredients of an article of food will be determined previous to manufacture or placing on the market. This is already done in the case of meats and meat products designed for interstate commerce. The "scientific" determination of the original state of the ingredients of foods, made after manufacture and placing on the market, is unsatisfactory. Bacterial

count may furnish a "strong indication," but it is not positive as the courts define positiveness. It is a lazy method. It shirks the responsibility that an inspection system would impose.

FIAT COMPETITION.

The investigations and prosecutions of various trusts by the general government will have one very important result. The subject will be thoroughly ventilated whatever the conclusions arrived at. Operations of the organizations known as trusts have been the subject so frequently of condemnation in high quarters and of condemnatory articles in the press, that their owners and promoters have had little sympathy from the public. Such individuals as have studied them dispassionately have concluded that they are not so bad as painted, and some of them are better than others. The word "trust" has come to be an epithet rather than a descriptive term. Its corollaries in the food world are "dopester," "food poisoner," "food faker," etc. A principle of law is that a litigant must come into court with clean hands, but do we come into the court of public opinion with clean hands when we deny the right of trust owners and promoters to be classed with legitimate business men?

These observations are suggested by the fact that ten meat packers are now on trial in the United States District Court for the Northern District of Illinois on indictments charging combination in restraint of trade in contravention of the provisions of the Sherman anti-trust act. However little interest a publication giving its attention entirely to food subjects may have in a legal question having so broad a scope as the Sherman act, the fact that these Chicago packers are engaged in producing an important part of our national diet and that their fate will have an influence on the conduct of their business as food purveyors henceforth prompts us to voice our opinion on this prosecution. It is not so much a question of law and of fact, in our judgment, as a question of economics. Combinations, not in restraint of trade or in restraint of trade, have made trade. Combinations of capital and the concomitant massing of labor to one end have given us commercial progress down through the centuries and have made of these United States one of the foremost commercial nations. Andrew Carnegie, in his testimony before the Congressional committee investigating the steel trust, stated that the fact that a great combination of capital controlled the steel industry of the country, made it natural and inevitable that such a combination of capital would control prices, however illegal that control might be. He suggested that if control of prices were to be taken from the owners of the industry, it ought to be vested in the government.

Mr. Carnegie is clever enough to see that commercial progress, combinations of capital and massing of labor, and agreements upon market prices, are practically coördinate—they are parts of the same process. The principle that applies to the steel industry applies to the meat industry.

Sometimes combinations in restraint of trade have failed to combine. Evidence in the case of the packers is to the effect that agreements were not always abided by. There were wheels within wheels. Sometimes acrimony arose over betrayed hopes. The short end did not always fall into the grasp of a satisfied par-

ticipant in a deal. Those features were as natural to the working out of a combination as the consummation of a combination, if it ever were consummated. And upon this head there is no definite or tangible evidence.

The basis of the Sherman law is the old theory that "competition is the life of trade." Like many another glibly spoken aphorism, this is not strictly true. Competition is the life of trade up to a certain point. Beyond that point, combination steps in and continues the vital process. Fiat competition will never be a success.

SHORTAGE IN POTATO CROP.

Estimates of actual quantity of potatoes in the principal Eastern and Middle Western states, made on January 4th, indicate a shortage in the supply of this important food product before the new season is well under way. As compared with the production and stock of potatoes a year ago this time, it is estimated that there is a deficiency of 80,000,000 bushels for the present year.

During the last week there were more than 100,000 sacks of potatoes imported from foreign countries, on which a duty of 70 cents per sack, or a total of \$70,000, was paid. Fruit and general produce dealers in this city assert that were it not for these importations the domestic crop of potatoes would be selling at \$1.50 per bushel, or three times the amount ordinarily paid. It is also asserted that the prevailing tariff rates on imported potatoes directly contribute to higher prices on this staple. In this connection it is pointed out that previous to the Dingley tariff, potatoes paid a tariff of 15 cents per bushel, while the present tariff rate is 25 cents per bushel. In view of this increase in tariff duties our domestic importations of potatoes have steadily fallen off until they have reached the stage where foreign sources are only sought in cases of domestic shortage.

The shortage in the crop of potatoes, it is said, has caused the prices that are paid to the American farmers steadily to increase. In former years the average price paid to the farmers has been 40 cents a bushel, while in the past year the price has increased until it reached an average ranging from 60 cents to a dollar a bushel. Local produce men predict that within the next three months, unless something is done to relieve the shortage by an alteration of the tariff rates, the farmers will receive as much as \$1.50 per bushel for their potatoes.

The figures showing the exportations of potatoes from the three principal foreign potato producing territories, England, Scotland and Ireland, during the latter part of last year, indicate that nearly 800,000 sacks, or nearly one-third of their entire surplus potato crop, were imported into the United States. Comparisons of the latest potato crop conditions throughout the nine potato producing nations of the world, it is said, do not offer much room for assurance that their surplus nor main quantities of potatoes can be depended on to relieve a serious shortage in our domestic crop.

MEETING A RETAILER'S PROBLEM.

A problem in the retail grocery trade taken official notice of by Food Commissioner Foust of Pennsylvania several months ago, which induced Mr. Foust to

issue a bulletin criticizing the practice of cereal manufacturers in using improper methods to induce retail grocers to stock up too heavily with package cereals, has attracted much attention in the grocery trade and one prominent manufacturer has taken the pains to circularize the trade with information designed to cure one of the evils referred to, the tendency of weevils to attack unprotected packages of cereals. The circular referred to says:

Weevil attacks always result from the outside.

Many jobbers' warehouses are badly infested with weevil—usually, unknown to the jobber. Weevil migrate or crawl out of the warehouse walls, floors, shelves, old cereals on hand, poultry feeds, etc., particularly during September and October; thus a new stock of rolled oats may show evidences of weevil on the outside shortly after arrival and the jobber or retailer jumps at the conclusion that the goods are weevily and the manufacturers responsible. In ninety-nine cases out of one hundred the product is absolutely free of weevil.

The full grown weevil, itself, is a little brown bug. It takes more than ten weeks for a weevil to develop from an egg to worm, and the worm in turn develop into the weevil. Since milling of new goods is commenced in August, there is not time from August 10th to October 31st for weevil to develop in new goods.

The jobber should maintain a separate cereal room, preferably on the second or third floor of his warehouse, such as is the case, usually, where flour is carried. Each shipment should be thoroughly examined for signs of weevil upon arrival. The cereals should not be stored near stock from which it can become contaminated, such as onions, fish, etc. The cereal room should be given a good coat of whitewash at least once a month, especially before storing newly arrived shipments. The cereal room should be gone over carefully with a solution of formaldehyde, slaked lime or some other preparation that will prevent the spread of weevil.

Old goods should, by all means, be kept apart from your fresh cereal stock. Store your stock so that your orders will be filled from the oldest shipment. Your Cereal room should be perfectly dry, and the stock should be moved once or twice each month.

If precaution along these lines is taken, the jobber's loss on cereals will be reduced to an absolute minimum.

THE TEA SITUATION.

Certain New York tea importers have joined in a protest to the President, in the form of a brief, against the present ruling of the customs division in the matter of the chemical test for coloring matter in teas. The President has referred this brief to the Secretary of the Treasury, who has been asked for an opinion on the question, and with that in view the brief has been sent to the customs experts and attorneys in the department for examination. Speaking privately, the experts who have so far examined the brief say that nothing new is contained in it.

It is not thought likely that the Treasury will agree to change its policy at the present time from the chemical test for coloring matter to the microscopic test. It is said that we are importing better green teas at the present time than we have ever before, that the teas are at least so good that a chemical test does not show them to contain any coloring matter. Experts further point out that the New York importers are merely calling for the application of the microscopic test on grades 5 and 6, which are the green teas, and have not requested that it be applied to any of the black teas.

There is a deep seated feeling in the customs division that this is merely an attempt to corner the green tea market and raise the prices of goods they are holding in warehouses by having the government exclude all green teas which they hope would result from the application of the microscopic test.

WILEY—CONTINUED.

We repeat that the cry of pure food, like charity, covers a multitude of sins. We recall that Barnum is reputed to have said that the American people like to be humbugged.

But to what extent and for how long do they like to be humbugged?

How much longer do American editors want their Washington correspondents to continue sending them tainted news to advertise Dr. Wiley?

How much longer will American editors continue to print and publish all the gush that is sent out by publicity bureaus that are being paid to advertise him?

Dr. Wiley's improper methods of enforcing the pure food law is responsible more than any other one cause, if not more than all other causes combined, for the present high cost of living. This is easy of demonstration, if any editor is anxious to find out.

Dr. Wiley's methods damage the pure food cause, instead of benefiting it, because he is using the law for self advertising and for reprisals. Do the editors who are helping to advertise him, and who are helping to make it possible for him to debase the law, know how many private fees he has taken, and from whom? Do they even know how much time he has spent away from the government service during the past year, and at whose expense he was traveling?

Do they know that he has been unable to appear as an expert for the government in any pure food case since the pure food law was enacted, because he could not qualify as an expert? Can they possibly think that such a man is the proper person to be entrusted with the enforcement of such a law as the food and drugs act? If so, what should disqualify a man for such a public office?

IMPORTANT IF TRUE.

A telegraphic news story from Washington under date of January 9th says:

Dr. H. W. Wiley, the government food guardian, is getting thin-skinned. He admitted it today to the House committee, which is trying to fix responsibility for last summer's high prices of sugar. Chairman Hardwick was trying to lead Dr. Wiley from the path of a protective tariff into the tariff for revenue only channel.

"I have been lambasted so much for my opinions that I am getting thin-skinned," said Dr. Wiley.

This is important if true. It is also refreshing and a hopeful sign. Some of the "lambasting" that Dr. Wiley refers to concerns numerous occasions when he exhibited a persecutory spirit—the spirit that sometimes prompts the mild form of persecution known as "lambasting." Dr. Wiley has not only lambasted and vilified honest food manufacturers, but he has put them to endless trouble and expense, regardless of their feelings. He may begin to feel a little sympathy for some of the persons whose sensibilities he has wounded if he is getting thin-skinned himself.

GIVES UP HIS LIFE FOR SCIENCE.

A cable dispatch dated January 5th says that Dr. Simon, the eminent bacteriologist, died in Zurich, Switzerland, as a result of having been bitten by an inoculated mouse, with which he was experimenting in an endeavor to find a serum for curing blood poisoning.

Dr. Simon was a son-in-law of Herr Bebel, the Socialist leader in the German Reichstag.

THE JOHNSON CASE A PRECEDENT.

Notice of Judgment No. 1182, issued by the Department of Agriculture on December 14th last, details the suit brought against F. J. Cheney of Toledo, Ohio, on a charge of violating the Federal Food and Drugs Act by shipping in interstate commerce a quantity of "Hall's Catarrh Cure" alleged to be misbranded in that "the statements appearing on the label and carton and in the pamphlet were false and misleading and calculated to deceive and mislead the purchaser because the said drug did not contain such ingredients or therapeutic properties capable of affording the relief or cure claimed therefor."

The case was heard in the United States District Court for the Northern District of Ohio, and the defendant on March 31, 1911, filed a general demurrer to the information. On June 2d the demurrer was sustained and the court rendered an opinion in which it said, among other things, that—"No charge is made that there is misbranding as to character and quantity of ingredients, but simply that a false deduction was made as to the therapeutic value of the remedy. The case presents no substantial difference from that of *U. S. v. O. A. Johnson*, decided by the Supreme Court of the United States on May 29, 1911, and it is plainly the duty of this court to consider that decision as an authority herein. The demurrer is therefore, sustained, and the information dismissed."

TAKING CHANCES.

A recent report from Washington to the effect that the Referee Board of Consulting Scientific Experts had rendered to Secretary Wilson of the Department of Agriculture a report on the use of sulphate of copper in canned goods. This report is understood to be decidedly adverse to the use of the copper coloring, and it is stated that a food inspection decision embodying the findings of the board will shortly be issued. It is further understood that the task of preparing this food inspection decision has been committed by Secretary Wilson to Dr. F. L. Dunlap with the aid of Mr. Dorset of the Biochrome Division.

The Washington correspondent of the AMERICAN FOOD JOURNAL calls attention to the facile disregard of legal requirements that characterizes the work done hitherto in formulating tentative food inspection decisions since it has been under the direct and untrammelled control of Dr. Wiley. It is possible that Secretary Wilson has come to the same conclusion as our correspondent, and believes that he is taking no greater chances on the legal features of the decision on sulphate of copper by committing the work of formulating it to Messrs. Dunlap and Dorset than he would if Dr. Wiley dictated its form. It is possible that the decision will have a greater certainty of being drawn in conformity to the law by the two gentlemen named than would be the case if Dr. Wiley and Dr. Doolittle drew it. We shall see what we shall see.

NEW YORK CHEMISTS' CLUB OFFICERS.

The election of officers for 1912 of the Chemists' Club of New York, held December 13th, resulted in the following selections:

President, Morris Loeb.

Vice-President, Otto P. Amend and George D. Rosengarten.

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FACTORS AFFECTING THE PERCENTAGE OF FAT IN CREAM.

One of the constant sources of friction between creameries and their patrons is the variations in the richness of cream. In order to arrive at a better knowledge of the factors affecting the percentage of fat in cream, experiments were conducted by O. F. Hunziker of the Indiana station and C. H. Eckles and H. S. Wayman of the Missouri station of the Department of Agriculture.

In testing the effect of speed with five different makes of hand separators on richness of cream, the Missouri station found that with one exception, set for thin cream, the greater the speed of the machine the higher the percentage of fat in the cream, and this effect was much more marked when the cream screw was set for thick cream. Within ordinary limits the greater the speed the less the amount of fat remaining in the skim milk. This did not vary to any marked extent whether the separator was set for thin or thick cream. The rate of inflow was uniformly increased by the speed. The explanation given for this is not that the greater the speed of the separator the more milk will run through it in a given time, but that it is due to suction caused by the flow of air through the machine. The capacity of the separators did not vary to any extent whether set for thick or thin cream. By varying the speed of the separator the Indiana station found the cream to vary in fat content from 10 to 65.5 per cent. The work of both stations proved that, contrary to the general assumption, the higher the temperature of the milk separated the thinner the cream. This was found to be more marked when the separator was set for thick cream than for thin cream. The colder the milk separated the greater the loss of fat in the skim milk. That the percentage of fat in the cream varies practically in direct proportion with the percentage of fat in the milk separated, or, in other words, that the ratio of cream to skim milk is not changed by the variation in the richness of the milk separated, was demonstrated by both stations. Prof. Hunziker found that by varying the rate of inflow the percentage of fat in cream varied from 23.5 to 70, the greater the rate of inflow the thinner the cream. This was substantiated by Profs. Eckles and Wayman, who found that even the height of milk in the feed can affect the fat content of the cream to some extent. Acidity had but little effect according to the Missouri station, except that with sour milk there is a tendency for the percentage of fat in the cream to be increased, especially when the cream screw is set for thick cream. A small obstruction in the skim-milk tube, due to dirt or some other foreign substance, does not as a rule make any marked change in the operation of the machine. If the cream opening is partly closed, however, the cream becomes smaller in quantity and richer. The accumulation of separator slime sometimes results in a larger quantity and thinner cream due to a partial obstruction of the skim-milk tube. To show definitely the effect of the amount of water used to flush the bowl on the richness of cream, Prof. Hunziker conducted experiments with the following results. When no water was used the average percentage of fat in the cream was 37.8; with water equal in amount to the capacity of the bowl, 37.3; with sufficient water to cause the cream discharged to appear watery, 35, and when twice the amount of water needed was used the percentage of fat in the cream was 33.5.

These experiments prove conclusively that, even though there is a wide variation from day to day in the cream tests, it does not necessarily follow that the creamery is dealing dishonestly with its patrons. They also show the necessity for uniformity in the care of milk on the farm, especially as regards separation, and in the sampling and testing of cream at the creameries.

If cream is tested correctly and if the tests of different lots of cream from the same patron vary, then these variations must be due to variations in the richness of the cream. It is impossible to procure cream of exactly the same richness from different skimmings from the gravity can. The richness of cream from a farm separator is primarily determined and regulated by the cream screw. The richer the milk the richer the cream if all conditions remain the same, for the ratio of skim milk to cream remains constant. During early summer months the milk is usually comparatively low in fat. Advance in lactation period and change from succulent to dry feed cause milk to become richer in fat. The first drawn milk is much poorer in fat than the strippings. The greater the amount of milk running into a separator of a definite capacity per

hour the thinner will be the cream. The greater the speed of the separator the richer the cream. If the speed is too low a large amount of the fat is lost in the skim milk. Warm milk produces more and thinner cream than cold milk. The proper temperature to separate milk on the farm is from 90 to 95° F. and immediately after it is drawn. The more water or skim milk used to flush the bowl of the separator the thinner will be the cream. The most satisfactory cream for the creamery is that which tests about 35 to 40 per cent fat.

If the tests are to be uniform and accurate, the cream must be in such condition, when sampled, that a fair and representative sample can be taken. If, at the time of sampling, the cream is too thick, is tough, dry and leathery on the surface, is partly churned or curdy, it is very difficult to secure a fair sample, and tests of such cream are likely to be irregular as well as inaccurate.

In order that the cream may be in proper condition for sampling and testing upon delivery to creamery, the farm separator should be thoroughly cleaned and scalded after each separation. After separation, the cream should be immediately cooled and kept cool by setting in cold water; the cream should be stirred occasionally; the cream should be delivered in clean cans not less than twice per week in winter and three times per week in summer; in transit the cans should be covered with a dry blanket or jacket in winter, and with a wet blanket or jacket in summer; cans should be reasonably full of cream in transit to prevent churning.

SUCCESSFUL DRUG PROSECUTIONS IN IDAHO.

The effectiveness with which the food and drug laws of Idaho are enforced by James H. Wallis, State Sanitary, Food and Dairy Inspector, is illustrated in a recent prosecution for the sale of morphine and cocaine in a manner contrary to law in Nampa, Idaho.

Fourteen charges were filed against Jacob Forch, a druggist, and James Rice, his clerk, charging them with selling cocaine and morphine against the state law to Elie Smith of Shoshone and Jerry Quinlan of Litchfield, Minn.

Statements confessing the whole system of obtaining the drugs from the time that they secured the first installment until the minute that one of them was caught coming out of the store with an unopened box in his hand yesterday were made by the dope fiends in the presence of Larry Maloney, chief of police; Dr. Quick, the city health officer, and G. W. Lamson, city attorney.

Quinlan said in his statement that they had come from La Grande, Ore., and had been supplied with the drugs when they left the city. Stopping off at Huntington they replenished their stock and got enough there to last them for a while after they reached Nampa. The first time they got the dope there they had a prescription from one of the doctors of the place. Later, they went separately into the Jacob Forch drug store and approached Forch himself, asking for "half and half," the mixed cocaine and morphine. Forch, they said, told each one that he would give it to him but that he had to be careful, as the health officers and the police of the city were on the lookout for these things and they might be caught at any time. After a time, "C. & M." stood for the goods, they said, and the money was placed on the top of the box so anybody in the store would not "get wise" to what was going on.

After taking the testimony, Inspector Wallis swore out a complaint against Jacob Forch, charging him on four counts with selling cocaine and morphine in packages without a label plainly stating that the box contained these drugs, four counts against Forch for selling cocaine and morphine without the prescription of a regularly licensed and practicing physician, four counts against James Rice, the clerk, for selling it without a label and two counts against him for selling without the prescription.

At the trial of the case the defendants pleaded guilty on six of the charges and were given fines and costs aggregating \$450. Inspector Wallis, addressing the court, stated that the state was determined to put an end to the illegal traffic in cocaine and morphine, and that he hoped the sentences imposed upon the defendants would serve as a warning to any other druggist who might be retailing these drugs in violation of the law.

It has been known that much morphine and cocaine has been sold, but it has been hard to catch those responsible for its sale. It is understood that the inspector expects to bring about other arrests.

Doings in Various State Food Departments

FORMIC ACID AS PRESERVATIVE FOUND BY MICHIGAN CHEMIST.

An advance copy of a report upon the finding of formic acid in fruit syrups by State Chemist Fern L. Shannon of Michigan is submitted by Mr. Shannon with the following comment:

"I feel that this is a new departure in the preservative line and I believe all food control officials and other food men will be intensely interested in it. The chemical evidence in this matter is incontrovertible and as it has taken months of close study and application I am absolutely sure of my findings."

The report in full is in the following language:

"Formic acid in 10 per cent aqueous solution, has been exploited for some time under the names Werderel, Fructel, etc., in Germany and England as a preservative for fruit syrups, etc. It is generally used in quantities of from 0.1 per cent to 0.25 per cent of absolute acid and has been found to be a very efficient preservative, retarding fermentative changes to a marked degree. In this strength the preservative is odorless and has a characteristic sour taste not unlike that of the natural fruit acids. Although this preservative is very freely used in Germany and England, it appears not to have received much attention from manufacturers of fruit products in this country. At least the literature and the reports of the Federal and State Departments do not disclose its use as a preservative in American fruit products.

"It is universally recognized that fruit syrups are prone to spoiling, that is fermenting and moulding as ordinarily exposed at the soda fountain, unless they be chemically preserved.

"The Crown Cordial and Extract Company of New York City is offering a line of soda fountain syrups which are said not to spoil and which are sold under a label that makes no mention of the use of sodium benzoate or any other chemical antiseptic. Extended experience with fruit syrups, caused me to look upon these products with suspicion. Consequently, during the past few months a study of fruit products has been made in this laboratory for the possible presence of added substances not mentioned in the list of ordinary preservatives used in this country. The markedly sour or acid taste of the Crown products (strawberry and pineapple) when compared with other syrups was very conspicuous. This fact led to an extended investigation (the details of which will appear in a later report) which resulted in the positive detection of added formic acid in considerable quantity, viz., about 0.10 to 0.15 per cent.

"Since the Crown Cordial and Extract Company's fruit products are widely advertised in druggists' and confectioners' journals, it is quite likely that they are or will be used at Soda Fountains in this state. According to Act No. 7, Section 1, Public Acts of 1905, 'No person, firm or corporation shall manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any food product containing benzoic acid or benzoate of sodium, or any other harmless preservative, unless each and every package containing the same shall, in the condition in which it is exposed for sale, be distinctly, conspicuously, and legibly branded, labeled or marked, in plain English letters, with the words 'Prepared with', followed by the proper English name of the preservative used; provided, that nothing in this act shall be construed to prohibit or regulate, by branding or otherwise, the use as a preservative of common salt, syrup, sugar, salt petre, spices, alcohol, vinegar or wood smoke; and provided further, that the provisions of this act shall not apply to dairy products.'

"Therefore, these products, if sold under a label which does not plainly state 'Prepared with Formic Acid', are in violation of the Michigan Food Laws."

WHAT FAULTY MILK DID IN MISSOURI.

The St. Louis *Globe-Democrat* says:

Dr. Cutler, state food inspector, in officially summing up some results of his work during the year, renews his earlier contentions concerning the milk supply of St. Louis. He states that, as the result of investigations, it is possible to say that fully one-half of the milk supply of this city falls below the standard. Some of the poor supply is short in the percentage of butter fat, some of it is long in the percent-

age of water, and some of it is shot with deleterious substances used to conceal its counterfeit character. Another percentage of the poor supply is that of unsanitary milk coming out of unclean dairies.

This is not an encouraging outlook. But it would be more discouraging than it is if the rigid investigations and prosecutions forced by the state inspector and his official aids had not instituted some reforms. It is possible that we are now so badly off as we were at the time the disclosures upon which Dr. Cutler's conclusions are based, were being made. If we are not immeasurably better off, as a result of those disclosures, then we may not hold Dr. Cutler or the State of Missouri responsible, because, as Missourians, we can not see even after we are shown. So near the new year it is best to be optimistic and to conclude that having learned, through the experience of the results of such remissness, what remissness must be costing us in life and that vitality which is the essence of progress, we are not duller than those of whom it is often said that experience is the only teacher to make them learn.

But even at the worst, the law of compensations may still work for us. That law operates in everything. While the brief agitation was at the height, it was made a part of a police report that the "tall man and the short man" who, up to that time, had been committing divers and sundry depredations in many quarters of the city, had held up an incoming milk wagon in the early hours of the morning, robbed the driver of his cash, "drank much of the milk in the cans" and disappeared. Since that night, although up to that time the tall man and the short man had been ubiquitous and energetic in all sorts of evil doing, they have not figured in police reports as all-round malefactors and the perpetrators of nearly all crimes. It is possible to indulge the hope that the milk wagon they held up was loaded either with formaldehyde or microbes, and that their drinking of "much of the milk in the cans" terminated their criminal careers. If so, slack inspection in the past has had its compensations for us, but now that the tall man and the short man are gone, there is no reason why we should not expect more vigilant inspection in the future.

TENNESSEE FOOD DEPARTMENT'S ANNUAL REPORT.

The following is an abstract of the report of the Department of Pure Food and Drug Inspection of Tennessee for the year 1911, submitted to Gov. Ben W. Hooper by Lucius P. Brown, head of the department:

"To His Excellency, B. W. Hooper, Governor of Tennessee:

"Sir—As required by law, I beg to present you the following as my report on the operations of the food inspection department for the past year:

"The progress in the work of the department has been great, due to changes in the organic law under which it is organized, and to increased appropriations resulting in increased efficiency.

"As the result of experience in the administration of state food and drugs act for three years, recommendations were made by me to the legislature for certain changes, and agreed to by them, resulting in the following:

"In section 1, a possible serious defect, due to ambiguity of language, was cured, removing the possibility of attack upon the act on constitutional grounds.

"In section 2, the provision was made that certain simple drugs, largely sold in package form by country stores, which were being sold below standard and without intelligible labeling, were required to be of the standard strength only.

"In section 4, the privilege of exemption from the prohibition as to misbranding of articles known under their own distinctive names, was found capable of interpretation against the consumer's interest, and of abuse. This privilege was, therefore, withdrawn by law.

"In section 5, the recognition by the state of the federal guaranty or articles coming into the state from without seriously hampered the work of the office. We found it impossible to prevent the introduction into the state of illegal articles, when these were guaranteed under the national food and drugs act, except by the action of the federal authorities, or to prevent the sale of such articles which we found in in-

stances to be freely carried on after notice by this department, under the protection of this recognition of guaranty. In order to prevent such continuance of sale, therefore, the list was so modified that the continued sale of such articles may be prosecuted after notice to the seller or publication. We are, by this change, enabled to conserve absolutely the purity of the food and drugs supply of the state.

"It had been the custom for this department to allow offenders to present to the department their statement as to cases of illegal sale in the form of hearings. Such provision is in line with the advanced thought of authorities and in the interest of fairness. A change, therefore, of section 5 of the act has allowed for such hearings by law.

"It is the universal experience of food controls that the greatest single aid to their work is publicity. The reason for this will be apparent on a moment's thought and does not need consideration here. Section 10 of the act, therefore, was amended so as to allow of the publication as advertisements in newspapers of general circulation, of the results of the work of the department. Fairness to the sellers is assured by permitting that his statement of the case may be incorporated in the same place as such publication is made.

"These changes were not presented to the legislature without consultation with the trades concerned, so that in the interest of fairness their side of the case might be heard, and before making the final draft of the bill agreements were reached which were satisfactory to each side and believed to be fair both by the departments and the dealers.

"The resources of the departments were greatly increased by the last legislature. I have earnestly recommended an increase in every report made to your predecessor. The legislature of 1909 gave the department an assistant chemist. The legislature of 1911 increased by \$500 per annum the general appropriation for expenses of the department; by \$100 per annum the laboratory expenses, and allowed two sub-inspectors at an annual salary of \$1,200 each, making an allowance of the same amount for their traveling expenses.

"The work of the department has been increased by placing under it the enforcement of the state's new hotel law, providing for fire protection and the sanitation of hotels. This imposes a very considerably greater burden both on the personnel of the department and on its financial resources, as no additional appropriation was made by this act. The enforcement of all such statutes can, however, be made most cheaply to the state by combination (as has been done) with an existing department. This principle has been adopted in several states, notably in Kansas, in connection with that state's hotel law and in Indiana in connection with the enforcement of their weights and measures act."

FOOD ADULTERATIONS FEW IN INDIANA.

The Indiana State Board of Health points to the prosecution record of the department for December in support of the contention that food adulteration has virtually disappeared from the state. Of the twenty-six prosecutions, only two were for adulteration. One dealer adulterated some vinegar and another watered some oysters.

The remainder of the prosecutions were for violations of specific clauses of the state food laws other than adulteration. One was for selling a short weight bag of flour. Two were for misbranding eggs, under the new cold storage law. Nine were for selling milk containing visible dirt. Four were for selling bad eggs. The remainder were for maintaining unsanitary conditions in food producing or distributing establishments. The total fines and costs collected amounted to \$556.80.

In only one case did the department fail to convict, and in that case it is pointed out that there is a necessity of scientific training for the courts. A brewer was arrested for branding as temperance beer, beer which contained four and one-half per cent of alcohol. Brewmasters were placed on the stand who testified that beer was not intoxicating unless it contained at least five per cent of alcohol. The state showed that the majority of the beers sold in the state did not contain more than three and one-half per cent alcohol, but it did not convince the court, who acquitted the accused brewer.

The department found sixty-five illegal foods in 233 samples examined. The illegal foods were cider, temperance beer (Indiana law), candy, catsups, wheat flour, buckwheat flour, lard, meats (prepared), milk, cream, ice cream, sorghum molasses, pepper, syrups, tomato puree, and vinegar. The principal attention of the department for the month was

devoted to milk, in a crusade being waged against dirty dairies.

Forty-seven establishments were condemned during the month for unsanitary conditions or faulty construction. These included bakeries, confectionery establishment, dairies, groceries, meat markets, hotels, groceries and meat markets combined, poultry houses, restaurants and slaughter houses. Meat markets led the list with sixteen.

A class of forty applicants have been certified as eligible for appointment as city or county sealers of weights and measures under the new Indiana law, which requires, for certification, passing an examination by a state sealer, who is ex-officio Chief Chemist for the State Board of Health. The law became effective January 1st, and requires that in a county where no sealer is appointed, the work shall be done by county auditors. A penalty for failure to act is attached.

CALIFORNIA INSPECTOR WARNS DEALERS.

State Pure Food Inspector Frank Oakley, who has opened an office at 379 Wilcox building, Second and Spring streets, Los Angeles, is sending out a warning to manufacturers and retailers that all products containing benzoate of soda must show the actual percentage of the drug contained in the product. Some manufacturers are putting out goods labeled merely "Contains Benzoate of Soda." This is not sufficient and retailers are warned to check over their stock and have re-labeled any goods which do not show the actual quantity of benzoate contained. Goods have been found on this market which contain as much as two or three tenths of one per cent of benzoate and the labels do not show the actual quantity. Any reasonable quantity can be used if the quantity is shown on the label.

Within the year fines under the food law have been paid in Los Angeles county to the extent of \$2,000, which is pretty conclusive proof that the law is being energetically prosecuted. Jobbers and manufacturers who have been so carefully watched in Southern California are rather surprised to note that most of the food law activities of the state are confined to the Southern California territory. It is said, for instance, that practically nothing has been done in San Francisco as regards labeling cold storage eggs, although the local jobbers have been put to heavy expense thereby.

FOOD INSPECTION BY CHICAGO HEALTH DEPARTMENT.

The Bulletin of the Chicago School of Sanitary Inspection of January 6th, refers to the work of the food inspection force of the City Health Department in the following language:

"In the food division the working force was enlarged by the addition of three clerks and twenty-seven inspectors, making a staff of eight clerks and sixty-eight field men. As originally planned, it was intended to increase the field force in country dairy inspection work, but owing to the lack of funds, this work was not commenced until the early part of June, continuing during the summer months and up to September. Since that date the Department had only ten men in this branch of the work up to November 1st, after which the force was further decreased to five.

"Had it been possible to keep the full force working, the entire dairy field would have been fully gone over, a work which the Department has not yet been able to do to its entire satisfaction. There has been an improvement in the inspection system of milk platforms, railroad freight yards and city pasteurizing plants. Some changes have been made in the method of handling inspections in the field which, it is believed, have resulted in more thorough and effective work."

COLORADO DRUG INSPECTOR CORRECTS AN ERROR.

The last bulletin of the Colorado State Board of Health contains the following paragraph at the top of the first page headed "A Correction":

"It was erroneously stated in the last issue of the bulletin that 'artificial benzoic acid, one of the legalized adulterants of food, is made almost exclusively from the urine of horses and other herbivorous animals, and always carries the aroma peculiar to its source.'

"As some manufacturers have taken offense at the above statement, we hereby wish to correct same and state that formerly benzoic acid was made from the above-mentioned source, but in later years it has been obtained from other sources, and the product from urine is hardly, if ever, used in this country."

State and Municipal Meat Inspection

Its Importance as an Auxiliary to Federal Inspection.

By Dr. A. D. Melvin, Chief Bureau of Animal Industry, U. S. Department of Agriculture.

To provide the consumer with a wholesome and adequate supply of meat involves a number of steps. First, we depend upon the farmer to raise a sufficient number of food animals, and these should be healthy. After they are brought to market the packer or butcher slaughters them and prepares the meat and other products. At this point there should be inspection to guard against disease, harmful preservatives, other unwholesome conditions, and fraud. The dealer comes between the packer and the consumer, and it is his duty to keep and deliver the product in good condition.

Finally there is the housewife, whose duty it is not only to procure wholesome meat, but to see that it is kept, prepared and served in a sanitary manner. It is my purpose to discuss more especially the subject of inspection, and particularly the need for local inspection to supplement the government inspection system.

It is estimated that a little more than one-half of the total meat supply of the United States comes under the inspection of the federal government. Most of the remainder receives no inspection whatever, while a portion is subjected to a limited inspection by state or local officers.

The federal meat inspection system depends for its authority upon what is known as the interstate and foreign commerce clause of the constitution of the United States, and this inspection is therefore limited to the product of establishments that are engaged in interstate or foreign commerce. The federal government is powerless to exercise any supervision over an establishment and meat from which is slaughtered, prepared, sold and consumed entirely within a single state. It is a duty which the state or municipality owes to its citizens to install and maintain a system of meat inspection that will afford adequate protection against diseased and unwholesome meats, so that all meat sold locally which has not passed the federal inspection will come under the requirements of an efficient local inspection system.

The principal object of meat inspection is to protect the consumer from diseased or otherwise unwholesome meat. This involves not only the inspection of the meat for the detection of disease or other unwholesome conditions, but the requirement of sanitary conditions and equipment in the abattoirs and packing houses and the enforcement of sanitary methods in the preparation, curing and handling of the meat.

To meet the first requirement there should be a competent veterinary inspection of the carcass at the time of slaughter, or in case inspection at the time of slaughter is impracticable the inspection may be performed later if certain organs are retained with the carcass. Too often the local meat inspection service, where it exists at all, does not provide for an inspection of this kind, but consists merely in the inspection of the meat as it is offered for sale in the markets, with sometimes a sanitary supervision of the markets.

Although such inspection has some value, it is far less important than the veterinary inspection of the carcass at the time of slaughter. The average consumer is able to determine for himself whether or not meat is tainted or spoiled, but he is not usually able to determine for himself whether or not it comes from an animal affected with a dangerous disease. Neither can even a skilled inspector always detect disease in meat after it has been dressed and the viscera disposed of. The most important requirement

in meat inspection therefore is to protect the consumer against dangers from which he cannot protect himself, and this can be done only by a class of inspection that is not often provided for by local authorities.

Some idea of the need for local inspection may be obtained by considering the extent of disease among live stock slaughtered for food, and the insanitary conditions under which much of the local meat supply is slaughtered and handled. Recent statistics of the federal inspection show that nearly 2 per cent of the carcasses are affected with some disease or condition making it necessary to condemn them either in whole or in part.

Of these condemnations nearly 87 per cent are due to tuberculosis alone. We find that about 1 per cent of the cattle and

over 2 per cent of the hogs slaughtered under federal inspection are affected with this disease to a greater or less extent. The establishments under federal inspection draw a large proportion of their cattle from the ranges and feed lots of the West, where tuberculosis is rare, hence the percentage of this disease found in the federal service is far below that which occurs in animals from the dairy regions, where the disease is much more prevalent.

It is estimated at least 10 per cent of the dairy cows in this country are affected with tuberculosis, and it is a well known fact that dairy stock forms a much larger proportion of the animals killed at the small local slaughter houses than at the large establishments under federal inspection. One effect of the federal inspection has been to cause the owners of diseased or suspicious looking animals to send them for slaughter to an uninspected place rather than to an establishment where they would have to run the gauntlet of strict inspection. For these reasons it is certain that the percentage of disease is much higher among animals slaughtered at the small local places than among those slaughtered under federal inspection.

Uninspected slaughter houses as a rule have many features that are not only objectionable, but dangerous to health. The smell of the country slaughter house is proverbial, and the conditions at some of these places are inexpressibly foul and filthy. They are usually located in some out of the way place, sometimes outside the corporate limits, often surrounded by stables or even being a part of a building which is also used as a stable, barn, or for some other purpose. Sometimes they are located on the banks of small streams and pollute the water.

Such places are often the means of spreading disease. It is frequently the custom to feed offal to hogs or to throw it where dogs, hogs, and rats have access to it. By this means trichinae, tapeworms and other animal parasites are spread, some of which are dangerous to man. Hog cholera, tuberculosis and other contagious diseases may also be spread by such conditions. Usually there is no protection to the meat against rats, flies and other insects and vermin, and this condition is a dangerous source of contamination and infection.

The objectionable conditions are not confined to the little slaughter houses in small communities. Even in some of the large cities there are large abattoirs which do a purely local business, and at which the conditions and methods are exceedingly insanitary, and where a very poor class of live stock is slaughtered.

Much can be learned from the methods of the federal meat inspection service in planning and executing state or municipal



DR. A. D. MELVIN.

inspection, although local inspection in small communities presents certain difficulties and problems not found in the federal service. The objects to be gained and the principles to be applied are the same in each case, but the different conditions sometimes require different methods.

The federal inspection is the growth of long experience and it is now thoroughly systematized and has reached a high degree of efficiency. It has been in operation for nearly twenty years, and for the last four years of this period it has been conducted under the new law which confers authority and appropriates funds sufficient to make it much more comprehensive and efficient than in previous years. Most of the establishments under federal inspection are large and are grouped at stock centers, although there are quite a number of smaller isolated establishments.

The local authorities must often deal with small, scattered, poorly equipped and very insanitary slaughter houses, and it is sometimes out of the question to require the reconstruction of the buildings and the installation of expensive equipment in order to bring about a proper sanitary condition.

In large cities most of the large establishments are already under federal inspection. All places not under this inspection should be brought under an efficient state or municipal inspection, and this can be accomplished by following in the main the federal regulations.

The greatest difficulty of local inspection comes in dealing with the small scattered or isolated slaughter houses, some of which kill only a few head of animals a day, or slaughter but once or twice or three times a week. Such conditions make it advisable to concentrate the slaughtering in one place. Where establishments are large enough and well enough equipped from a sanitary standpoint to warrant separate inspection, this may be arranged, but the small scattered places where inspection would be too expensive and sanitation impossible should be superseded by a central abattoir, where inspection can be carried out in the most efficient and economical manner.

Municipal abattoirs are quite common in Europe and have been found to be an exceedingly satisfactory method of enforcing an efficient inspection, but such abattoirs are very few in this country. Aside from facilitating inspection and making it more economical, central abattoirs afford commercial advantages.

They provide machinery, facilities and equipment such as are found in large packing houses, and which are not otherwise available to the small butchers. There is also economy in the cost of operations of a central abattoir as compared with the cost of a number of scattered places, and there is an opportunity to obtain revenue from by-products which are usually wasted at small establishments.

It is preferable to the city to build and own the abattoir and to require all slaughtering to be done there, except where conditions are such as to justify private plants, and where inspection is already in effect at such plants or can readily be applied. Where it is not practicable for the municipality to own and operate an abattoir, the next best plan is to have a central public abattoir owned and operated by private enterprise, and in that case the plant should, of course, be under an official inspection system.

The expense of building a municipal plant could very well be met by an issue of bonds and a sinking fund for the payment of these bonds could be created by setting aside a portion of the revenues. There should be a system of fees or charges to provide an income sufficient to pay the cost of operating and maintaining the abattoir and the cost of inspection, and to meet interest and provide a sinking fund in case bonds have been issued. A certain sum per head could be charged for killing, in case the entire operations were carried on by the management of the abattoir, or the butchers could be permitted to bring their stock to the abattoir and do the work there themselves by paying a certain sum per head for this privilege.

It is very desirable to have the inspection done by veterinarians wherever possible. A man who is a graduate of a good veterinary college is not only specially trained to recognize animal diseases, but also has a good knowledge of the danger of such diseases to human health. If a veterinarian is not available in some of the small villages the services of a local physician might be obtained.

Perhaps the most satisfactory plan of compensating the inspectors is for the state or the municipality to pay them annual salaries. No inspector should, under any circumstances, receive his pay directly from the slaughterers, for reasons that are obvious. The expense of inspection may be met by charging fees, but these fees should go into the state or municipal treasury, and not directly from the meat dealer or slaughterer to the inspector.

If a system of local inspection is to provide adequate pro-

tection to the health of the community, it should cover absolutely all meat offered for public sale, and which has not been subjected to federal or other competent inspection. All places of slaughter should be subject to inspection and regulation, and permitted only by license. If any uninspected meat is allowed to be sold, or if any slaughtering places are allowed to remain uninspected, there will be danger to the health of the community.

If an unscrupulous man wishes to dispose of diseased or suspicious looking live stock he will take it to the place that is without inspection. If one man is allowed to maintain an uninspected slaughter house there will be a great temptation for him to buy stock that would not pass at the inspected places, and thus a single exception may be a source of great danger to the health of the people.

The Bureau of Animal Industry of the United States Department of Agriculture is prepared to furnish plans and specifications for several abattoirs, and will gladly give any possible information or advice with regard to establishing local inspection.

In closing, let me emphasize the consumer's part in selecting sound meat and in caring for it properly in the home. Many people are indifferent as to whether the meat that is sold to them is inspected or not. They do not realize the dangers from uninspected meat. With some the price is of more consequence than wholesomeness.

So far as the retail price is concerned, it is doubtful if inspection causes any increase. The dealer who sells uninspected meat will ask as much for it as for inspected. Then there are people who have an erroneous idea that the government inspection covers all meat offered for sale.

In buying meat the housewife should be careful to select only that which has passed either the federal inspection or an efficient state or municipal inspection. Ask to see the inspection marks on the meat.

It should be remembered, however, that the inspection marks only mean that the meat was all right at the time it was last inspected and passed, and that it may later spoil if not properly handled and kept. The final inspection devolves upon the housewife. No matter how carefully the public inspectors have done their duty, there is danger of contamination or spoilage after the inspection and before the product reaches the consumer.

After buying inspected meat and seeing that it is in good condition when received from the dealer, it should be kept in a clean refrigerator until the time of cooking, and should not be exposed to flies or other contaminations.

ALUM DIETING EXPERIMENTS.

Twelve University of Pennsylvania medical students who "need the money" have put their bodies in the care of the United States government for experimental purposes and formed an eating squad which meets morning, noon and evening to eat government food, prepared with different kinds of alum, in order to test the effect it will have on their systems.

The experiments are being carried out by Dr. Alonzo E. Taylor of the Referee Board of Consulting Scientific Experts. The squad has been eating food containing alum for some time and shows no ill effects. Its members will continue on the diet until June. The members of the squad receive their board and \$5 a week.

On the squad of twelve men there are two "controllers" who eat the same food without the alum. None of the twelve men know who these two men are. Dr. Taylor says he does not want the psychic element to enter into the experiments. The results of the experiments will not be known for a year.

OVERPRODUCTION OF CONDENSED MILK.

The Van Camp Packing Company will temporarily discontinue the manufacture of condensed milk at their plants in Bryan and Wauseon, Ohio, and Adrian, Michigan. Machinery will be installed for the manufacture of creamery butter. This change is made because of an overproduction of condensed milk. Not wishing to close its plants, the Van Camp company will temporarily manufacture creamery butter, to accommodate their patrons who have been furnishing a large supply of milk.

INDIANA TO HAVE NEW DAIRY BUILDING.

The committee on agriculture at Purdue University, to which was left the question of how best could be used the bequest of the late William C. Smith, has decided to recommend to the trustees that the \$50,000 in cash be used in the erection of a building for the dairy department.

Household Science and the Table

CANNED FRUITS AND VEGETABLES FOR MID-WINTER.

By Elenora Elizabeth Reber.

Canned fruits and vegetables are indeed a great boon to the modern housewife, who finds it sufficiently hard, even at the most favorable seasons of the year, when fresh foods of all kinds are available, to maintain that "infinite variety" so necessary to the well provisioned table. But it is not alone from the standpoint of expediency that this class of foods is used, but it is really a necessity, inasmuch as a healthful diet must include fruits and vegetables. During the midwinter season in most parts of the country such fresh fruits or vegetables as the markets afford are of the forced variety and often must be shipped long distances, so that even at best they are often of poor flavor, and invariably high in price, making them an impossible luxury to the housekeeper of moderate means. Properly canned products of the fruit and vegetable class, on the other hand, retain their attractive color

These germs are practically the sole cause of decomposition or rotting. The exclusion of air from canned articles, which was formerly supposed to be so important, is unnecessary provided the air is sterile or free from germs. The exclusion of air is necessary only because in excluding it we exclude the germ. . . . Even after sterilization is complete the work is not yet done. The spores of bacteria are so light that they float about in the air and settle upon almost everything. . . . Therefore it is necessary after sterilizing a jar of vegetables to exclude carefully all outside air. If one bacterium or one of its spores should get in and find a resting place, in the course of a few days the contents of the jar would spoil. This is why the exclusion of air is so important a factor, not because the air itself does any damage, but because of the ever present bacteria."

While the day of home canning is not entirely past, the percentage of American housewives who now burden themselves with the exceedingly arduous task of canning with their own hands the fruits and vegetables which they expect



THE GREATER PART OF THE PREPARATION OF FRUITS FOR CANNING IS ENTRUSTED TO WOMEN'S HANDS.

and lose little of their flavor in the process through which they pass, making it almost impossible for one to detect any difference either in taste or appearance between canned and fresh articles. The volatile oils which give flavor to most vegetables are not lost by sterilization as it is now practiced in modern factories where canned goods are packed.

The variety of canned goods which may be bought at any grocery store in this day is almost without limit and includes every kind of fruit or vegetable, practically, that grows. It matters not whether it be pumpkin or pineapple one may desire it is easily attainable and at a price not excessive. While the general term "canned goods" of course includes fish, meat and other products that are put up in tin containers and hermetically sealed it is the intention of this article to deal only with canned fruits and vegetables.

"The art of canning or preserving in one form or another is almost as old as history itself," we are told in one of our government bulletins. "The early Chinese possessed this secret long before the era of modern civilization, but the 'reasons why' which lay back of the art have only recently been thoroughly explained. The great secret of canning or preserving lies in complete sterilization. The air we breathe, the water we drink, all fruits and vegetables are teeming with minute forms of life which we call bacteria, or molds, or germs.

to serve on their tables during the winter months is greatly smaller than was the case a few years ago. It is not, however, wholly because of the saving in time and strength that women no longer can so extensively in their kitchens, but because of the great improvements in methods of canning as in use in modern, up to date factories, equipped with laboratories in charge of experts and every mechanical convenience for expediting the work, which enable the manufacturer to produce an article fully as good or even better than is possible for the home canner to put up.

Manufacturers have spent immense sums of money and brought expert knowledge and exhaustive experimentation to the task of perfecting canning methods and to make them as simple as possible. There are no "trade secrets" about the process, however; it is exactly the same in fundamentals as the one used in the ordinary kitchen. The best canned goods are those which are given the least processing commensurate with insuring keeping quality. The great aim in packing fruits or vegetables of any kind is not to create flavor, but merely to retain the original taste of the article being canned. No amount of processing can in any way improve the flavor of a fruit or vegetable which was originally insipid, imperfectly or overdeveloped. The canning process, briefly, involves the placing of the thoroughly cleansed article into tin

containers, hermetically sealing the cans and sterilizing the contents by the application of the necessary degree of heat, and with the addition only of seasoning—sugar or salt, as the case may be—to the liquor in which the article is packed. Unless a can of fruit or vegetable is spoiled by defective tin or improper venting in the factory, it should keep indefinitely and not be affected by heat or cold. A defective can will swell so that it cannot be readily pressed in at the ends. It is wise to notice this feature when purchasing canned goods and if the can is bulged when brought from the grocer, return to him unopened and have it replaced. Grocers are guaranteed against "swells" by manufacturers and they should accordingly be willing to make the exchange without argument.

Then do not forget to empty the can of its entire contents just as soon as it is opened. Food that is allowed to stand in an open tin even for a very short length of time is absolutely unfit for consumption.

The three great staple canned vegetables are tomatoes, corn and peas, while the varieties of fruit canned in the greatest quantity are apples, peaches and pears. Millions of cases of these articles are packed every year and there is probably not a home in the land which has not at some time or other during the year consumed its quota of them.

A visit to a canning factory is of great interest to anyone and should prove especially so to women, since they are the real food purveyors of the world. Not long ago it was my privilege to watch operations in one of the largest peach canning factories of the country. Peaches in their ripened state are delicate of texture and in handling the fruit preparatory to its processing utmost care is observed to avoid bruising the surface.

Arrived at the factory from the orchard the peaches are first given a preliminary sorting, culls being thrown aside,

hot, remaining in the bath for a few seconds only, during which brief interval the surface of the fruit is thoroughly sterilized and the skin is softened and loosened, so that it is easily removed in the next part of the process. This is accomplished in the simplest manner imaginable. A series of perforated trays is so arranged that as the fruit passes along it receives a deluge of cold water, from above and beneath simultaneously, both sides of the peaches being well covered. The force of the water washes the peel from the fruit, which soon comes out smooth and shiny, looking like hemispheres of pure gold. A simpler, cleaner, more sanitary method could hardly be devised than this. The peeled fruit is next automatically delivered into a sterilizing steam chest being, where it remains for just three minutes, the temperature of the chest being maintained at 212 degrees Fahr. Coming out it is again subjected to a shower of pure cold water and finally passes to the grading tables to be sorted as to size with mechanical appliances. After sizing, the fruit is again automatically carried to and dumped into the canning bins, and still immersed in running water conveyed to the hands of the fillers. The fillers are women workers who wear sanitary gloves as they gather up the beautiful golden hemispheres and place them carefully and systematically in the cans. It is interesting to note that the fruit is handled but a single time with unprotected hands of the worker, and that is when it is cut and pitted at the very first stage of its preparation for processing.

When the cans are properly filled they are conveyed on a continuous belt to the syruping tables, and as each can passes under a tube it receives its required amount of clear syrup made from pure water and pure sugar in the proper proportions. Still another sterilization of the contents of the containers takes place after the syrup has been added to the



AFTER THE CANS ARE FILLED THEY ARE SENT TO THE STERILIZER.

The fruit is then turned over to the women cutters and pitters. In fact the greater part of the work of the modern fruit or vegetable canning factory is entrusted to women's hands, so we find that the labor involved in preparing this class of food for consumption in the home while it is shifted from the kitchen to the factory, still devolves upon feminine shoulders.

Provided with sharp bladed knives made for that purpose the workers deftly sever the fruit in two equal pieces and remove the pit. The cut fruit is immediately slipped into tanks of running water to prevent oxidation, which takes place quickly when a cut surface of fruit is exposed to the air, and also to keep the peaches in as clean and sanitary a condition as possible. From these water tanks the fruit is next conveyed to machine peelers. The halved peaches pass through a scalding containing a weak lye solution kept boiling

fruit and the cans are for this purpose passed into a second steam chest remaining therein five or six minutes. Upon emerging from this steam chest they go to the capping machine and the covers are crimped on at a very rapid rate. The final cooking then takes place. Filled cans by the hundreds are put into immense cooking vats, and the contents cooked at a high temperature that insures beyond possibility of doubt thorough sterilization.

In culinary process there are countless ways in which canned fruits and vegetables can be used with just as satisfactory results as when fresh articles are utilized. When cooking with canned products which have already been boiled until partly done it is necessary to remember that less time should be allowed than would be required were the fresh product used in its raw state. All kinds of cream soups are as delicious when prepared from canned vegetables as with

fresh. Pies and sauces are likewise not different in quality or flavor when canned fruits are used in place of fresh ripened specimens. Following are appended a few recipes for dishes that may be successfully prepared with canned ingredients:

TOMATO ASPIC SALAD.

Drain all the liquor from a can of tomatoes and put it into a saucepan with a bay leaf, a half teaspoonful of onion juice, and a sprig of parsley; season with salt and white pepper and bring to a boil. Let simmer for twenty minutes, then stir into it a half box of gelatin which has previously been soaked in a cupful of cold water. Add a teaspoonful to the mixture and as soon as the gelatin is dissolved, take from the fire and strain through a jelly bag. Pour into a mold and set in a cold place to form. When stiff turn out upon a platter and garnish with lettuce leaves and serve with a mayonnaise dressing.

GREEN PEA SOUP.

Turn the contents of a can of peas into a saucepan, add half a dozen sprigs of parsley and several sprays of mint. Boil until the peas are broken and soft, then season with a little sugar and salt and pepper to taste. Rub through a fine colander; return to the fire and stir into the liquid a large spoonful of flour rubbed into one of butter. Stir until quite thick then add a pint of meat stock, bring to a boil, take from the fire, and serve with dice of fried bread.

CORN PUDDING.

Drain the liquid from a can of corn and chop the kernels fine. Into a pint of milk stir four well-beaten eggs, a tablespoonful of melted butter, the chopped corn, a teaspoonful of sugar, and salt and pepper to taste. Turn into a buttered pudding dish, set this in an outer pan of scalding water, and set in the oven. Cook until set and brown.

TOMATOES AND EGGS.

Cut eight hard boiled eggs into thin slices. Turn the contents of a can of tomatoes into a saucepan and stew for ten minutes, seasoning to taste, and thickening with three teaspoonfuls of corn starch rubbed into a tablespoonful of butter. Take from the fire. In the bottom of a buttered dish put a layer of bread or cracker crumbs, make these very wet with the tomatoes, and lay on them slices of egg sprinkled with salt and pepper. Put in another thin layer of crumbs, and pour over more tomatoes, laying more egg slices on these. When the eggs are all used pour in the remainder of the tomatoes, sprinkle the top with buttered crumbs and set the dish in the oven for five minutes or until heated through.

ROYAL PEACH PUDDING.

Beat the yolks of five eggs until light with a cupful of powdered sugar which has been creamed with a tablespoonful of softened butter. When well blended add a quart of milk in which two cupfuls of dried crumbs have been soaked for two hours. Beat hard, and turn into a pudding dish set in an outer pan of boiling water. Bake until set and slightly browned, draw to the door of the oven, cover with canned peaches that have been drained from their liquor and cut small, and spread thickly over these the whites of the eggs beaten stiff with enough sugar to make them very sweet. Brown this meringue very slightly. Set away to become cold and serve with rich cream.

SPICED PEAR PRESERVES.

Cut canned pears into long slices, and for each four pounds of fruit allow three pounds of granulated sugar, a quarter pound of ginger root, sliced very thinly, six whole cloves, and the juice of two large lemons. Put into a kettle a gill of the pear liquor which was drained from the fruit, the ginger root and cloves, the sugar, and the lemon peel which was taken from the two lemons and cut into thin strips. As soon as the sugar is melted lay in the pears, simmer for ten minutes, take out and put into jars, boil up the syrup, and when thick, pour it over the pears, filling the jars to the brim and sealing immediately.

FRUIT SANDWICHES.

Mix together three tablespoonfuls of canned cherries—stoned and chopped fine—the same quantity of canned and grated pineapple, and a tablespoonful of canned and minced apricots. Drain all the fruits dry from the liquor in which they were canned, and mix with a tablespoonful of very thick, clotted cream. Spread between thin crackers and serve at once.

FRITTERS.

This is the time of year when pancakes, fritters, waffles and hot tea and breakfast cakes find full appreciation. There

are people, misguided of course, who would eat buckwheat cakes every month in the year and hot breads of whatever sort without an interval of change, even in midsummer, but this is not the part of dietetic wisdom. All things have their season, and winter is primarily the time when smoking hot cakes are most appreciated.

Fritters should be quickly made, the batter thoroughly beaten and fried in oil so hot that it gives off a blue smoke. Or a good test to ascertain the correct heat of the oil is to drop a small portion of the batter into it, and if the temperature is sufficiently high the batter will quickly rise to the surface in a puff ball. A little baking powder may be added if it is desired to have the batter very light.

Almost any kind of fruit, fresh or canned, may be used in fritters. Cut the fruit and sprinkle with sugar, add a little grated lemon rind if liked, and let this stand for two or three hours. Then drain and dip in the batter; or the fruit may be chopped fine and stirred into the batter.

A good fritter batter is made of one egg, a cupful of milk, one teaspoonful of salt and one cupful of flour. If used for a sweet dish add a teaspoonful of sugar to the mixture. This batter is intended for articles which are to be given only a thin covering.

A heavier batter is made as follows: To the well-beaten yolks of two eggs add one-half cupful of milk, one-fourth teaspoonful of salt, one cupful of flour and one tablespoonful of melted butter or olive oil. Beat the mixed ingredients until the batter becomes smooth and set aside for an hour or longer, and just before using add the whites of the two eggs beaten very stiff.

IN PRAISE OF THE CURRANT.

"If the many good qualities of the currant were fully known," says a famous English doctor, "there would be no danger of over-production of this fruit," and he then goes on to say that currants are remarkably rich in the saccharine element at its best, being presented in the form of what is known as "grape sugar," a food highly valuable because it digests very easily and quickly and affords real sustenance to the body.

Then there is the tartaric acid of the currant, which gives it such a pleasantly-sharp taste. Tartaric acid is a most healthful and valuable constituent. Without it currants would be all sweet like honey, and it would then be impossible to eat them very freely and continuously, as one would soon tire of such a diet.

Lastly, the currant contains another valuable element—potash. This little item has, perhaps, been somewhat overshadowed by its bigger neighbor, the grape sugar, but currants would fail to be the desirable agent they are in maintenance of health if potash were not present. All foods then in which currants appear are to be shown especial favor by one who wishes to provide, not only richly but wholesomely, for the family table.

ANENT THE FRICASSEE.

Whenever reasonable doubt exists as to the age of a fowl the fricassee is always to be recommended as a safe and delicate way of preparing. If the fowl proves to be young three-quarters of an hour will suffice to render it tender; but if an old one it may take two hours or longer. The snowy dishes of fricassee seen on French tables are produced by blanching the fowl by soaking in cold water an hour or two before cooking. In this case the flavor is sacrificed to some extent to the looks. If boiling water is poured over the fowl at the beginning the flesh will always be dark. A happy compromise between the two extremes will be found in immersing the fowls in cold water, bringing the water quickly to the boiling point, then pushing the kettle to the back of the range, where the water will bubble slowly all the time, but never hard in the center of the pot. When tender the chicken may be removed, and the gravy thickened with a large tablespoonful of butter, and two of flour, which have been mixed and cooked together in a small saucepan. This should not have been allowed to brown. Stir the mixture well, and return the chicken to the pot to simmer slowly for ten minutes longer. Dish the chicken, draw the pot to the back of the range and stir into it the beaten yolks of two eggs mixed with a quarter of a cup of milk, to which has been added a little of the hot broth to prevent curdling. Beat well and stir over the chicken. This fricassee is particularly nice served either with rice border or one of mashed potatoes. A little chopped parsley added to the gravy five minutes before dishing up is esteemed an improvement by many.

What the Other Fellow Thinks

Character of Mayor Shank of Indianapolis.

When Mayor Lew Shank of Indianapolis attracted national attention by his cut-price auction sale of Thanksgiving poultry, most people probably regarded the affair as a new form of the game of the alderman who gives away Christmas turkeys.

But down in Indianapolis they say it is nothing of the kind. They say that Lew Shank didn't lose anything on his auction sales of potatoes, poultry and Christmas trees, and doesn't pretend that he did, and that these differed from other commercial transactions only in the fact that the object was not profit but a demonstration and an object lesson.

The fact appears to be that the commission men and market stall holders of Indianapolis had formed a combination, perhaps informal, but effective, for the robbery of the producers with one hand and of the consumers with the other. Early last summer Mayor Shank became convinced of this. For instance, he found fruit growers within three miles of Indianapolis who told him that they got better prices in St. Louis, though their fruit was sold at lower retail prices there.

There was an ordinance which imposed a rather high license tax on curb or wagon vendors of fruits and vegetables. The mayor virtually suspended the ordinance, and prices tumbled at once, while the farmers within hauling distance said they got better returns. The mayor had thrown open a market which had been restricted.

But when autumn came and local supplies were exhausted prices went up again; potatoes, for example, to \$1.60 per bushel. Mayor Shank brought in Michigan potatoes by the car load and sold them at 75 cents. He didn't add to his bank account, neither did he deplete it; he paid expenses.

The Thanksgiving sales of poultry and the Christmas sales of nuts and mincemeat were similar object lessons. They demonstrated to the people of Indianapolis that a considerable part of the high cost of living was due to the greed of Indianapolis middlemen who plundered the producer with one hand while they plundered the consumer with the other. And they do say in Indianapolis that the average of food prices has not been so low there for years. At the same time no complaints are coming from the producers.

Undoubtedly Mayor Shank has had a lot of fun out of these proceedings. He has been an auctioneer for thirty years, with a reputation for entertaining talk that has long brought crowds to his sales whether they really wished to buy or not. It was his companionable qualities and friendly acquaintance as an auctioneer that won him the mayoralty nomination and election.

But he doesn't jest with the serious business of the city. He has selected capable business men for his department heads. He has gone on, conservatively, with all desirable public improvements. He has not enforced the liquor laws more strictly than his predecessors, but he has enforced them impartially. The brand of beer a saloonkeeper sells has no influence in the mayor's office.

And so they are talking about Lew Shank as the next Republican candidate for Governor of Indiana. And it is generally admitted that if he goes out after the nomination it will be hard to keep it away from him.

The position of Lew Shank is a striking testimony to the power in public life of good nature, common decency, honest desires, and shrewd mother wit.—*Chicago Inter Ocean*.

American Firms Barred by England.

The British government has decided to exclude from tendering for contracts for meat for the British army and navy, those American packing house companies and firms which are under indictment by the United States government. The official notice says:

"Pending the ultimate result of the legal proceedings in the United States against certain meat packing firms, it has been decided by the British government that none of the firms involved shall be invited to tender for army supplies."

Officials of the War Department in London added that the action was taken in ordinary course and in pursuance of a policy adopted long ago, not to buy from concerns in litigation with the government. British firms are so treated, and now the policy is extended to include American companies. However, it is apparent from other advices that there is a political side to the action, as it is known the ministry is com-

pelled to cater to the Laborites and advanced Radicals in Parliament, and these groups had protested against patronage of "trusts," native or foreign.

It is expected that the course of the War Department will be followed by the British Admiralty, and the navy tenders will be forbidden also. The contracts for both branches of the service have gone heretofore to the American packers, and have amounted to from \$15,000,000 to \$20,000,000 annually. It is expected that now the orders will go to Argentine or Australian concerns.—*National Provisioner*.

Believe in Therapeutic Value of Olive Oil.

Olive oil has been known since the most remote ages; in all districts where the olive could be cultivated, in every country where the olive tree grows naturally, olive oil has been extracted from its fruit. In fact there can be nothing more simple than the preparation of olive oil from the matured fruit of the olive tree.

The olives first of all are crushed, they are then exposed to pressure, and the oil extracted is afterwards allowed to rest in a cool place. One can say indeed that the process is even more simple than that of making wine, so elaborately and constantly dealt with in all histories.

Virgin olive oil is therefore a natural product, obtained without the intervention of chemical agents. This oil is neutral, sweet, and creamy to a supreme degree; does not easily become rancid, and is not drying. Olive oil is so greatly esteemed by the medical faculty that it is freely prescribed for many diseases of the liver and intestines, and daily doses of as much as half a litre are by no means of rare occurrence.

Its digestive qualities, and its value as a lubricant to the digestive organs, as well as the laxative virtues of olive oil have been recognized at all times. Its superiority as an aliment pure and simple has never been hitherto denied, and it is only due to the fact that olive oil is higher in price, especially during the past few years owing to the partial failure of crops, etc., than the cost of seed oils, that the latter have come into use for cooking and edible purposes.

"It is from the viewpoint of health and its beneficial influence upon the digestive organs, which alone place olive oil in the van of all its competitors. Where, for instance, has one known or ever heard of an invalid being prescribed daily doses of cotton seed oil for an illness? Surely the remedy would be worse than the disease.—*Circular of the Nice Olive Oil Traders*.

Effect of Cold Storage on Prices.

The influence of cold storage on prices, to which Secretary Wilson devotes much space in his annual report, is a matter which has heretofore provoked sharp differences of opinion among economists. On the one side it has been held that but for cold storage prices would be much higher than they are. The argument in support of this view is that but for cold storage the public would have to depend upon the primitive system of providing for its wants from day to day, an arrangement which in a country of more than 90,000,000 people would inevitably mean a very high level of cost for the ordinary articles of consumption. There would be no kind of storage under this system for many of the commodities most in use. The meat supply would be always behind the demand, as the slaughterers would wait upon the development of the market and prices would remain firm. Cold storage is storage. It has been established on a hint from nature which the progress of science has enabled man to utilize. This, in brief, was the view of the Massachusetts Commission on the Cost of Living, which in 1910 made a very elaborate report on the subject. The Commission denied that cold storage had raised prices as a system. On the contrary, it maintained that cold storage had "beneficial effects," among which was to increase production. The effect of increasing production was to lower prices. Cold storage did this "by extending the period over which perishable products can be marketed and thus stimulating a larger volume of production."—*Boston Transcript*.

The Hygienic Value of Salads.

Probably no detail of the French menu is so important to use as the salad. Very few American families know what an invaluable delicacy a genuine French salad with a dressing of good olive oil and pure, fragrant vinegar, is—invaluable, because of its effect on the digestion and health. There is very little nourishment in salad leaves until the oil has been added, and the oil is what many of us need, according to the doctors, who deplore the insufficiency of fat in the average American's diet. It is excluded therefrom for the very good reason that the average American finds it difficult

to digest it. But it is right there that the salad comes to the rescue. The vinegar in it, if genuine, excites by its fragrance and acidity the digestive glands not only in the mouth and stomach, but in the pancreas, which acts on all the constituents of food, particularly the fats. There would be vastly less intestinal indigestion in this country if every family followed the French custom of eating salad at least once a day.—*Century Magazine*.

Diminutive Fines for Food Law Violations.

About once a month the *Merchants' Journal* receives from the federal pure food officials a big batch of decisions on pure food cases. The documents give the result of arrests and prosecutions for violations of federal statutes, and explain fully the nature of the prosecution.

The peculiar thing about it is the size of the fines. Generally when a man is prosecuted by the government in the Federal courts he gets a penalty, if guilty, in some degree commensurate with the supposed dignity of the court and the importance of the case.

But the people who are prosecuted in the Federal court for violating the Federal pure food law are convicted and fined \$5, \$10 or \$25—seldom more. It is a sort of government police court, apparently, for petty offenders.

It seems a little bit grotesque to see a million dollar corporation pay a \$10 fine for selling impure or adulterated food.

Violators of the state pure food law right here in Kansas are forced to pay bigger fines than the great corporations which are found guilty under federal statutes, and whose business runs up into the hundreds of thousands of dollars.

This may be the way to force big manufacturers to respect the Federal statutes, but it does look as though the government might manage to get enough out of the fines to pay for printing the decisions.—*Merchants' Journal, Topeka, Kan.*

Frauds in the Sale of Oleomargarine.

Every prosecution for the violation of the oleomargarine law, and there have been many of them of late, is but another argument in favor of the bills now pending in Congress which have for their purpose the prevention of frauds in the sale of this commodity. The only valid objection to oleomargarine which can be offered is that unscrupulous dealers sometimes sell it for and as butter, and it is maintained upon the authority of the Bureau of Internal Revenue, that if the pending bills are passed with the original package clause that it will be practically impossible to substitute it for butter. That it will prevent substitution has not been denied by any authority of standing, and those who are interested in its manufacture and sale are just as desirous as the butter interests that it be sold for what it is.

The recent prosecutions, and all which have gone before, show that the present law does not prevent fraud, but is an actual invitation to it. It is apparent that Congress has awakened to this situation, and after the passage of the new law, now pending, the prosecution of small swindlers will cease, because it will be impossible for them to ply their trade.—*National Provisioner*.

The Farmer Gets Only 50 Cents.

If Secretary Wilson's aphorism is true, and if "for every \$1 the consumer pays the farmer gets only 50 cents," then there is something fundamentally wrong with our system of distribution, notwithstanding its great development. The takers of toll who stand between producer and consumer are too numerous or they are too exacting in their demands. The task of remedial statesmanship is to find out where the difficulty lies. The toll-takers, or many of them, are essential parts of the machinery of distribution. Transportation, storage and delivery are services that cannot be dispensed with in the transfer of products from the point of origin to the ultimate user of the same. Somebody must carry commodities; somebody must safe-keep them until they can be marketed, and somebody must distribute them in smaller lots suitable to the requirements of the consumer. Whether the cost of these necessary services is too high is what needs to be found out, and, also, how they could be more economically performed.—*Philadelphia Record*.

Sugar and Economics.

When prices advance the cry of "bust the trusts" comes crescendo-like, but in a case like this, that treatment, instead of meliorating, would only aggravate the trouble. When there is a natural shortage in the production of any commodity it is not only inevitable, but highly desirable, that the price of that commodity should advance. It is also a highly beneficial

movement, because, as in this case, if despite the shortage of the sugar crop, the price should remain stationary, we should go on using sugar just as freely as we did in years of plenty, with the consequence that all or some of us would be in danger of suffering a total deprivation for some length of time. The effect of advancing prices is to enforce the practice of economy by the great bulk of the people, and that economy is a guaranty that all will share in an inadequate supply. Advancing prices as a consequence of short production is a very ethical and humanitarian process, and instead of getting mad about it we should express our gratification.—*Dallas News*.

Restaurant Luxuries at a Low Price.

At present there are in London quite a number of restaurants of a unique type. They are simply grand in appearance, and walking into them entails more satisfaction than the food which is served. There is one which is built of granite and marble, with noble lines of architecture, and it is situated in the center of London's most fashionable district.

As one goes toward this place to enter it the gorgeous official in a uniform of blue broadcloth, highly decorated with gold lace and braiding, and wearing a spotless white leather belt with a highly chased gilt buckle, opens the door and bows a sedate welcome. Inside the decorations are more costly and elaborate even than the outside. The walls appear of pure onyx marble, the architectural structures are of imposing Doric design; frescoes, and stained glass windows give an idea of luxury unequalled in most of the metropolitan churches.

Inside that building the "Bah Jove" youth can imagine himself a Roman emperor, and he can dine at the modest cost of 31 cents.—*New York Evening Post*.

Early Life of a Philosopher.

Ruskin was once a grocer. In 1874 he opened a shop in Paddington street, Nottingham, in order, as he announced, "to supply the poor with pure tea in packets as small as they choose to buy, without making a profit on the subdivision, larger orders being, of course, equally acceptable from anybody who cares to promote honest dealing." The shop did not attract. Ruskin complained in "Fors Clavigera" that "the poor only like to buy their tea where it is brilliantly lighted and eloquently ticketed; and as I resolutely refuse to compete with my neighboring tradesmen, either in gas or rhetoric, the patient subdivision of my parcels passes little recognized as an advantage by my uncalculating public." The shop soon closed down, and the grocery trade lost the most distinguished representative it ever is likely to possess.—*American Grocer*.

Coffee as an Aid in Training a Wrestler.

Cordereli, the big Turkish wrestler, walked ten miles in the cold along Sheridan road today as one of the features of his training plan for his New Year's day match with Jess Pedersen, the big Dane. Then the Mohammedan, who wears three medals presented by as many sultans for wrestling prowess, consumed nearly a gallon of strong coffee. After he had become warm, the foreigner gave Manager Picrri the signal that he was ready for mat work of the most strenuous nature.—*Chicago Evening Post*.

ILLINOIS BREWERS MEET.

The thirteenth annual convention of the Illinois State Brewers' Association was held on January 3rd in the rooms of the Cook County Brewers' Association in the Schiller building, Chicago. Thirty members and a number of visitors were present. The principal subject discussed in the address of President Fecker, Jr., was legislation and the question of local option. The reports of the various executive officers showed a satisfactory condition of the organization.

Resolutions of regret at the retiring of Treasurer Joseph Theurer were adopted, and addresses were made urging an increase in membership and a strengthening of the lines on the prohibition and county option situation.

The following officers were elected for the ensuing year:

Ernest Fecker, Jr., Danville, President.

George Reisch, Springfield, First Vice President.

Edward C. Leisy, Peoria, Second Vice President.

Peter S. Theurer, Chicago, Treasurer.

William Legner, Chicago, Secretary.

Trustees—Charles J. Vopicka, Chicago; A. C. Radeke, Kankakee; Robert Bethmann, East St. Louis; Ernest Kunde, Chicago; H. F. Piepenbrink, Joliet.

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Enforcement of State Food Laws

I. The Use of Chemicals In Foods

By H. R. Wright, Former Dairy and Food Commissioner of Iowa.

EDITOR'S NOTE.—This is the first of a series of articles by Mr. Wright on the general subject of the enforcement of state food laws. Articles to follow will cover adulterations generally found in foods, especially in candies; unsanitary factories, dairies and places where food is retailed, and the need for more

sanitary legislation; the work that food commissioners really do and how much money they spend in the work of enforcing the laws. The present article is based on the compiled reports of the food commissioners of seventeen of the most prominent states in the Union, whose work may be said to be fairly typical of the work done by food officials throughout the entire country.

The recent investigation of Dr. Wiley by Congress has been put before the public in such fashion that a number of timid ones reach a still more firm conclusion than they had previously entertained that the food laws of this country are not at all enforced, and that poisoned and adulterated foods are every day sold to the unsuspecting public, and especially to children and other classes least able to protect themselves. Without discussing the merits of the Washington controversy, let us address ourselves to a study of the work of the various state food commissions. Some of the state commissions have been in existence for a long time. There has never been a suggestion that any one of them has been hampered by any one at all. Each has had full and free control of the enforcement of the food laws in his state. Most commissioners have had ample funds and force at hand to assist in the detection of

adulterated foods and the enforcement of the laws against them.

After a somewhat extended acquaintance with the food commissioners of the United States, I want to say that I thoroughly believe in the honesty and ability and energy of every one of them. Some of them, in my opinion, are entirely too radical and do more harm than good to the pure food movement, but every one of them that I have ever met impresses me as being eager and anxious to protect the people and to enforce the law. A food commissioner has every inducement to make good. He is authorized to enforce the laws that have the active and vociferous approval of every newspaper and every individual in the country. The exceptions are negligible. He knows that activity will surely bring expressions of approval from the public. He knows that prosecution of food law violators will



H. R. WRIGHT,
Former Dairy and Food Commissioner of Iowa.

bring newspaper and personal commendation. He especially knows that the detection and punishment of those who sell poisonously adulterated foods will bring him particular renown and that such approval will be merited. Besides the incentive that every honorable man has to do his duty, the food commissioner has every selfish incentive to make good by more or less spectacular work in finding and punishing those who would sell unwholesome or chemically adulterated foods. Sometimes this incentive carries away the judgment of the excitable food commissioner and he promises more than he can perform. Then he finds himself a little embarrassed when he comes to write his official report and to compile the list of prosecutions that he has made and the adulterations that he has detected.

I think we may take it as absolutely established that the reports of the various food commissioners of the states show three things: First, the amount of money they have used; second, the kind and character of food law violations and of adulterations that they and their chemists have discovered and punished; third, suggestions for improvements in their laws. The second of these things is of the most importance. Who cares how much money is expended if it is for the protection of the public health? Who cares whether the food commissioner suggests further and other laws if his report shows him to be discovering vile and wicked adulterations in large numbers? What we want to know is the real state of affairs as shown by his official report of work done and adulterations discovered.

If nearly every food manufacturer in the country is a food dopest, is a poisoner of the people, is a destroyer of child life by the sale of poisoned foods such as children use, we want to know it, and to what source of information can we go with so much confidence that we shall find the truth and all of it as the official utterances of those charged with the enforcement of the laws? If chemicals are common in foods, if new uses for them are constantly being found in foods, if continued prosecutions do not prevent their use, we want to know it, so that we can the more strengthen the laws and the forces that should enforce them. If, on the contrary, the report of the efficient and radical and energetic food commissioner is that food law violations are scarcely ever by the use of dangerous drugs or chemicals, that a very large percentage of detected violations of food laws are such as might have been avoided if the label had been proper, that most food law violations at the worst touch the pocket book rather than the health of the purchaser and that only exceptional cases of the use of chemicals have been found, we shall sleep better nights and shall more tranquilly eat what is set before us.

If the latter is the case we shall somewhat lose confidence in those alleged food magazines that take pleasure in reading us fairy tales of the giant of food manufacturer who incloses in every package of his food a few invisible imps and ogres who will tear our vitals. Of course the fairy tales are delightful reading. Of course a good many of us enjoy that thrill of horror that comes while we read. Of course some of us really like to be humbugged. But once in awhile there is a man, and sometimes there is a woman, who is looking for *facts* rather than fairy tales, and this story is written for such seekers after the truth. Melo-

dramatic fabrications have no place in discussion of such an important subject as food control.

I propose to set forth the accomplishments of each of the principal food law executives of the country, and for fear that I should be accused of illuminating this story by means of my own imagination I shall present a table showing so far as possible the number of violations reported by their chemists and the number of prosecutions undertaken by each commissioner. If you have heretofore secured your information about food adulterations from the yellow magazines of this country, if you have given heed only to the vociferations of those who seek to hold themselves in the public eye on some other basis than service to the people, you will be not a little disappointed when you study the table given herewith. Your attention is therefore called to the fact that the figures given are from official reports of men who are charged with the real enforcement of the law, men who must take the culprit into court and there face him and his attorneys with the facts that will convict him as a violator of the laws of his state.

With this table of the total prosecutions before us, and remembering that any and every food commissioner could scarcely avoid prosecuting the seller of foods that are likely to be detrimental to health, let us discuss some of those subjects that so easily occupy the field of vision of the usual space writer for the yellow magazines.

We have been horrified by the lists of chemicals said to have been found in candies and other confections largely sold to children; we have been assured that arsenic was present on numerous occasions in various foods. Wood alcohol in spirits, ammonia and clay in baking powders, creosote on hams and other smoked meats, cocaine in soda fountain drinks, rosin and furniture glue in candies and ice cream, rotten eggs in cakes and bakery goods, and various other dreadfuls in common foods send a thrill of fear down our respective backs; but they do not annoy the food commissioner because he never has had occasion to prosecute any one for any such offense.

Saccharine, salicylic acid, sand, sawdust, shellac, slack lime, soapbark, soapstone, starch, stearine, succrate of calcium, sulphites, sulphur dioxide, sulphurous acid—no, dear reader, this is not a list of words from the dictionary, but is from a list of awful things that, according to one enthusiastic defender of the health of the people, are a few of the alphabetical and poisonous things you may expect to get in your foods. Note the list of chemicals in the table. This list is absolutely complete and authentic so far as the records of the officials quoted go. The chap who says that any numerous list of chemicals of any kind is used by the manufacturers of food is a plain, ordinary distorter of the truth, in the same class with Ananias, who is said to have prevaricated on a noted occasion strictly for a money consideration.

Saccharin.—Of about 500 prosecutions for the use of chemicals, 146 are for the use of saccharin, and it must be remembered that some states have laws forbidding the use of saccharin by name, not necessarily because its use is thought to be detrimental to health but because its use in the place of sugar might be construed as a deception, unless its presence was stated on the label. Only nine of the seventeen states have made any prosecutions for the use of saccharin at all, and in such radical states as Minnesota and Wisconsin only one-fifth to one-third of the detected cases have

TABULATED REPORTS OF FOOD LAW VIOLATIONS AND PROSECUTIONS

This table is compiled in the following manner: The official reports of the commissioners of the respective states for the years given have been carefully read and the violations detected and the violations prosecuted have been compiled. In the major part of the table all the matters reported by the commissioners have been listed. In the part of the table devoted to chemicals, all the detected violations in which the use of chemicals is listed are given. These latter figures are duplications of those given above in the major table. Some of them are even duplications in the smaller table because sometimes saccharin and one of the preservatives are found in the same article, as ice cream cones. I have faithfully compiled these facts and figures and if there are any errors they are very small and are clerical errors only.

It is quite difficult to list all violations and prosecutions upon the same basis and in order to get all the facts it will be necessary to make some explanations of the figures, which it is impossible to do in the form of a table. The reason for this is that some states simply list the articles as "adulterated" as the reason for the prosecution. Others give the exact reason for the prosecution. For example, catsup in Minnesota is the cause of prosecution, as stated, for the reason that it contained more benzoate of soda than was stated on the label. In some other states it is simply "adulterated."

For the states from Minnesota to Massachusetts, figures are available for the detected violations, under the column headed V, and also for the successful prosecutions, under the columns headed P. For the other states there are no available figures for the number of cases of violation which the chemists found, but only the prosecutions made. In North Dakota and Missouri the data give only the results of analyses and not at all the prosecutions made, though prosecutions are made in both states. I have therefore counted all the violations as though they were prosecutions.

SUBJECTS OF INVESTIGATION FOR VIOLATION OF THE LAWS	Minnesota, 09 & 10		Michigan, 1910		Wisconsin, 09 & 10		Ohio, 1910		Illinois, 1910		Connectic't 09 & 10		Pennsylv. 09 & 10		Oregon, 09 & 10		Massachu- setts, 1910		Utah, 09 & 10		Tennessee, 10 & 11		S. Dakota, 3 mo 1911		Iowa, 1911		Indiana, 1911		New York 1910		N. Dakota 1911		Missouri, 1911		Total Prosecu- tions.		
	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	V.	P.	P.	P.	P.	P.	P.	P.	P.	P.	P.	P.	P.	P.	P.	P.	P.				
Baking Powder.....	31	9							84	3					1		2		2						5										20		
Butter (renovated).....	31	18	6		18	2	8	8	5	3	22	18		9			1				1														78		
Beverages, soft.....	42	13	3		107	23	19		31	2			57	62			6		3				12		4	28							13		166		
alcoholic.....	103	24					1						1	1			10						1				4							30			
Catsup.....	233	25	2		37		3		27		1		29						1				5							25				90			
Canned goods.....	15	1	5		17	3	6																	7										25			
Candy, coal tar.....	270	159					11		8										1				2												165		
Cereals.....	10		2	2	4	1	1		10				1																						4		
Cheese.....	5				60	8	3								2																				8		
Cocoa and chocolate.....	2																																			2	
Coffee and substitutes.....																																				1	
Coal tar color (see candy).....	397	196											10																							223	
Extracts.....	291	14	29		47	3	44	1	161	9	47	12		3		1	8					3	8	39	3	12										134	
Eggs, rotten.....		8												1																						59	
Hamburger (sulphites).....	33	11			7		33	27	2				3	19	16	13	9	17				5	13	13	7	33									105		
Honey.....	3						1	1																												1	
Ice Cream, not standard.....	3	3	219	5	5		5						46	52	2									4			2									155	
Cones and Wafers (borates or saccharine).....				4			1		47					8											11											23	
Jams and Jellies.....	16	5	12		15		1		41	2							2																			8	
Lards and substitutes.....	17	8	3				55	17	2		4	4	7	6																						35	
Meat, adulterated.....																																					
Meat, rotten or diseased.....													4	4																							
Milk, skimmed or not standard.....	263	45	298	126	224	108	149		316	89	33	31	155	98	68	42	1053	120																			
Milk, with chemicals.....																																					
Oleomargarine.....	87	43	24	4	47	8	106	87	176	165	13	34	116	111		4	16	11				19		8	3	234											
Olive Oil (cottonseed).....	6								24					1			41	15																			
Oysters (water).....							32	13						14																							
Pickles.....	11		4				36							12																							
Sausages (with cereal).....														36																							
Spices.....	59	4	3						36																												
Sugar, Syrup, maple.....	120	30	15				9	21	2					1	1		28	5	2																		
Sugar, Syrup, other.....							2	19																													
Vinegar.....	22		7		7		47	16	49	10			20	19			36	4	1																		
Unsanitary conditions of food.....		46			168				4				44																								
Weights, short or not stated.....	11	3									17	12																									
Total al.....																																			4689		
CHEMICALS IN FOOD, ALL KINDS EXCEPT COAL TAR DYES																																					
Alum.....									11				11																								
Benzoate Soda, in excess, or not stated on label.....	258	12	1		10				16		12		21				10				9					18											
Boric acid.....					9								6				1							15													
Copper, in peas.....			2		1																																
Formaldehyde, in milk.....														2					1																		
Salicylic acid.....	9	1					2										4	2																			
Saccharin.....	12	2	1		57	17			11		1		68						8																		
Sulphites (note Hamburger above).....	33	11			7	5	33	27	12				11	19	16	28	13	17																			
Sulphurous acid.....													11																								
Tale.....													9																								
Total al.....																																			516		

been prosecuted. The use of saccharin has been prosecuted as follows in the respective states:

Minnesota, ice cream cones.....	2
Wisconsin, pop, etc.....	17
Pennsylvania, pop, etc.....	67
Pennsylvania, ice cream cones.....	1
Utah, ice cream cones.....	5
Utah, pop, etc.....	3
Tennessee, soft drinks.....	11
South Dakota, soft drinks.....	9
Iowa, soft drinks.....	5
Iowa, ice cream cones.....	12
Indiana, soft drinks.....	7
Missouri, soft drinks.....	7

It is quite easy to see, therefore, that so far as the food commissioners are concerned the use of saccharin is confined practically to use in soft drinks and to ice cream cones. In view of the crusade made upon the latter product it is safe to say that this product is not very extensively used, and from the fact that not

all the cases discovered were the occasion of prosecution, that the food commissioner does not stampede quite so easily as some other people, and that he does not believe that its use is detrimental to health at all.

Sulphites.—The next largest number of prosecutions or detections of the use of chemicals is in regard to the use of sulphites. This chemical is used very largely in hamburger steaks. Now hamburger steak is a manufactured article, of course, but it is made by the local butcher, who saves the pieces of beef and when he has time he grinds them up and makes up a big plate of hamburger. Of course everybody knows that the air will change the color of the surface of the meat to a disagreeable shade, and so the wily butcher adds a little sulphite to make it retain its nice red color and to make it look fresh, when in fact it is not so at all. Incidentally the meat is preserved. By comparing the figures under the head of sulphites with those

under the head of hamburger it will readily be seen that practically all prosecutions for the use of this chemical have to do with the product made only in the local shops and that such prosecutions have nothing to do with any product put up by the commercial food manufacturer. The exceptions to this statement are:

Pennsylvania, candied dried fruits, etc.....	8
Massachusetts, candied dried fruits, etc.....	4
North Dakota, canned mushrooms.....	2
North Dakota, canned asparagus.....	1

In such products sulphites are used as a bleacher and its use in such products is properly charged to the food manufacturer.

Benzoate of soda.—Benzoate of soda comes next on the list with 96 prosecutions in 17 states, of which one-third are only detected violations in North Dakota. because we must remember that in North Dakota no record of prosecutions is made. So that actually 71 real live punishments have been inflicted for the use of the much discussed preservative. In Minnesota, for example, 258 violations have been discovered and 12 of them have been the basis of prosecutions.

In most of the states the law or the ruling of the commissioner requires that the presence of the preservative must be stated on the label, and the absence of the label statement constitutes the crime. Or where the law restricts the use of benzoate of soda to one-tenth of 1 per cent the presence of an excess over the amount stated is the subject of the prosecution. Whatever we may believe in regard to the use of this preservative, which the best authorities of the world have declared harmless, it is plain to be seen that the present laws are mighty well enforced when a great state like Pennsylvania in two years can only find 21 violations, or a great state like Minnesota in a like period only makes a dozen prosecutions. Benzoate of soda is absolutely prohibited in Indiana and only 18 prosecutions have been made. The record on benzoate of soda seems to indicate that a few of the commissioners, who loudly denounce this preservative as a virulent poison, act quite differently when they get down to the place where they start for the court room with a prosecution. One gets the impression that there is a whole lot of talk that is for publication purposes only and does not really mean anything. Anyway the only result so far of the agitation against benzoate of soda is to make the manufacturer of catsup put on his label the statement that he does use the preservative. If it has had any other effect, diligent search fails to show the result. All the detected violations have been in regard to catsup, with a few exceptions. They are as follows:

Wisconsin, cider	10
Pennsylvania, mincemeat	7
Pennsylvania, marischino cherries	2
North Dakota, sweet pickles.....	9
North Dakota, marischino cherries	1
North Dakota, cider	2

Boric acid.—Boric acid appears in our list of prosecutions 33 times. There was time when boric acid was a well known preservative in practically all our catsups and was supposed to be generally used in export butter. It now appears very seldom. Wisconsin punished eight persons for sale of cheese and one for sale of sausage containing boric acid. Pennsylvania punished five sales of wafers and one of milk containing this chemical. Iowa found fifteen cases of the use of boric acid in ice cream cones and wafers and most of these also had saccharin. It will be seen that the use of boric acid is almost nothing at all and that it has no particular class of foods to which its use for the purpose

of adulteration is particularly adapted, or in which it is at all likely to be found.

Talc.—Pennsylvania and North Dakota are the only states that have made any stir about the use of talc, though this is one of the favorites with the penny writers. In Pennsylvania the use of talc upon a certain form of candy was the occasion of nine prosecution and in North Dakota 26 cases of the use of talc upon rice were listed. No other states have made any adverse criticism upon this sort of an adulteration. The above is the foundation of the story that soapstone is used in candies.

Chemicals in milk.—We are usually assured that a quarter of a million infants die every year in this country by reason of the vilely adulterated foods that they are fed by their unsuspecting parents. It would look as though the right kind of food commissioner would feel like committing homicide upon any one who should sell any milk for feeding infants if the milk were adulterated with any chemical whatever. Four cases involving the use of formaldehyde and one the use of boric acid in milk have been discovered. In this connection it must not be lost sight of that the largest one subject of the food commissioner's activity is milk, that by far the largest number of his prosecutions relate to milk. This table shows nearly 1,500 prosecutions and a much greater number of detected violations in regard to milk, and only five of them show either formaldehyde or boric acid. No other chemicals have been detected in milk, no benzoate of soda, no salicylic acid or any other product of similar kind. So far as chemicals are concerned, one of two things is absolutely established, either *all* our food authorities are wholly incompetent or the use of chemicals in milk practically does not exist.

Salicylic acid.—If this table had been made ten years ago, and if there had been as much activity upon the part of food commissioners as there is now, a great number of cases of detection of salicylic acid would have been found. At that time, though real statistics are now lacking, it could have been shown that a great many people who are now vociferously calling our attention to the fact that they do not use the wicked and poisonous benzoate of soda nor the worse boric acid were unanimously using salicylic acid in their catsups and sweet pickles and every other product that they made. They even went so far as to participate in the meetings of the National Association of Food and Dairy Commissioners in the defense of one or both preservatives. They are now "holier than thou" people, then they were quite in the habit of using salicylic acid, which was perhaps the worst of all the chemicals that have been used extensively in foods. Only a few cases of its use have been lately discovered and that only in such products as fruit juices and ciders. Possibly the cases here listed were upon old goods that had not yet been destroyed.

Copper in peas.—Sulphate of copper gives a bright green color to all kinds of canned vegetables and is sometimes found in French peas. It has well nigh disappeared from American food products.

Alum.—No subject has been the basis of more controversy than alum in foods. It has been freely alleged that it is used in flour to whiten it and in vegetables of all kinds to make them crisp. Pennsylvania and North Dakota have laws which specifically prohibit the use of alum in foods and cases have been made in both states for the use of alum in pickles.

The sulphate of aluminum, which is the acid base in the so called alum baking powder, is a different thing

than the "alum" of commerce and of the laws, and its use is not yet prohibited in any state of the Union, notwithstanding that such baking powder has been the subject of most persistent attack for years. Its use is not believed to be harmful.

Sulphurous acid.—Pennsylvania has discovered and punished six cases of the use of sulphurous acid in marshmallows and five cases of the use of the same chemical in ice cream. These cases seem to be sporadic and not to indicate anything like a common practice and call attention to the fact that constant vigilance is necessary to prevent such instances.

Other unusual adulterations detected and punished are as follows:

Pennsylvania—Fish with coal tar dye.....	5
Buttermilk, with color	2
Cooking oil with coal tar color.....	5
Ice cream filler with saponin.....	3
Illinois—Evaporated milk, adulterated with lard oil.....	6
Coffee adulterated with chicory.....	1
Ice cream cones with color.....	1

A close consideration of the tables showing the use of chemicals in foods indicates very clearly that the whole list of chemicals used is very short, that the number of detected cases is mighty small, that the foods in which any of them are used are not such as are fed to infants or even to children of larger growth, that if we leave out of consideration the contested benzoate of soda and saccharine and the use of sulphites in local made hamburger, the case against the "American food poisoner" is based upon a mighty small foundation. The plain truth is that except the three mentioned, no one can mention a kind of food, or a class of foods in which any particular preservative is likely to be found, and the detected cases are in a large sense sporadic and unusual. For example, a year or two ago, a maker of a brand of cheese that is put up in little jars, a cheese which is famous and worthy of such fame, was found to contain boric acid. It seems entirely probable that such use was an ignorant experiment upon the part of the maker. So that we ought to be relieved on the score of the use of chemicals. I do not intend here to make any defense of the use of any chemical, from sodium chloride down, but I do say that the man who reads this record and who studies the official reports from which they are taken, and who still contends that American food stuffs are grossly adulterated with chemicals willfully shuts his eyes to the facts. And that the man who continues to say that American food manufacturers are users of poisons or chemicals willfully slanders a great industry and willfully deceives a public that is entitled to the best, and the best is the simple truth.

INTERNATIONAL CONGRESS OF APPLIED CHEMISTRY.

In order that the objects of the Eighth International Congress of Applied Chemistry may be attained, the committee in charge has prepared the following rules:

1.—That as many as possible of the papers to be presented at the various sections of the Congress and its sections and subsections be printed and distributed to members attending the Congress prior to the opening thereof.

2.—That as little time be given to presentation as is consistent with adequate exposition of the salient points of the communication.

3.—That as much time and opportunity be given for discussion as may be needed for a complete presentation of all the views of those members in attendance upon such discussion.

4.—That the discussions be recorded in sufficiently full manner correctly to reflect the views of those taking part in the discussion.

5.—That the proceedings be published in complete form as soon after the close of the Congress as is at all feasible.

After considerable study and inquiry the conclusion has been reached that hearty and earnest co-operation of all members of the Congress in the carrying out of the following tentative rules will result in the practical realization of all these things, and it is with that hope and expectation that the following tentative rules are submitted:

1.—All papers should be in the hands of the American committee on or before July 1, 1912.

2.—All such papers should be presented in duplicate, legibly written, but preferably typewritten.

3.—Each paper must be accompanied by an abstract thereof, also in duplicate, legibly written, but preferably typewritten.

4.—All papers received prior to July 1, 1912, and accepted for publication will be printed prior to the meeting of the Congress and grouped according to the sections to which they are assigned; papers received after July 1, 1912, and accepted for publication will be printed prior to the meeting of the Congress if practicable, but it cannot be guaranteed that they will be placed in the section to which they belong, though they may appear in an appendix.

5.—The American committee will neither revise nor edit any papers or abstracts; papers received for publication will be printed *in extenso* as offered, or only the abstract accompanying the full paper will be printed, or the paper will be printed by title only, together with the name and postoffice address of its author, or the paper will not be printed at all, as may be decided in each case by the committee on papers and publications.

6.—Authors will not receive printer's proofs of papers or abstracts submitted; authors must do their proofreading on the manuscript; whatever is printed by the American committee will be printed in exact accordance with whichever of the authors' manuscripts is selected for publication.

7.—Discussions will be recorded in the official language in which they are uttered, and participants in the discussions will have an opportunity of editing the manuscript report of such discussion; the American committee will print from such edited manuscript reports of the discussion, and printer's proofs will not be sent to participants.

8.—No paper which has previously been published shall be read at the Eighth Congress nor printed in its final report without the consent of sectional executive committee, the committee on papers and publications and the executive committees of the Eighth Congress having first been obtained.

The American committee will proceed to print the papers during the first half of July, 1912. The size of the edition printed will be determined by the number of membership fees received on or before July 1, 1912; persons contemplating membership in the Congress should have their membership completed prior to July 1, 1912, in order that they may be sure of receiving a copy of the report of the Congress; membership fees can be received after July 1, 1912, only as subject to the condition that copies of the report of the Congress cannot be guaranteed, and will be supplied only until the number of extra copies printed shall have been exhausted.

WORK OF THE PENNSYLVANIA COMMISSION IN 1911.

Dairy and Food Commissioner Foust of Pennsylvania, reviewing the work of his division for the year 1911, says that in many respects it was a record-breaker. The receipts from fines and license fees totaled \$120,993.48, while the total expenditures for the year were only \$83,983.13. In other words, the collections for the period exceeded the expenditures by \$37,910.33, a sum equal to nearly one-half the total expenditures. In 1910, the excess of receipts over expenditures was \$31,000 in round figures.

By provision of law, all moneys collected by the division are turned over to the State Treasury for the use of the Commonwealth, and all expenditures made under fixed legislative appropriations. The protective service the division can perform for the public must be measured not by the fines and fees collected, but by the appropriations set apart for its work.

During 1911, 8,200 samples were purchased and examined, as compared with 5,600 in 1910. In 1911, 1,029 cases for violation of the laws were terminated, 78 per cent of them by the payment of fines imposed; in 1910, 667 cases were terminated. Of the cases for 1911, 481 were instituted under the milk and sausage acts, approved by Governor Tener. The number of violations of these new laws proves the urgent need of these beneficial acts.

The Wiley Investigating Committee's Report

Following is the report in full of the Committee on Expenditures in the Department of Agriculture, submitted to the House of Representatives on January 22d by Chairman Moss:

The Committee on Expenditures in the Department of Agriculture beg leave to submit the following report of the recent hearings, commonly referred to as the "Wiley investigation." This inquiry was instituted on information that an alleged conspiracy had been entered into between certain high officials of the Bureau of Chemistry and Dr. H. H. Rusby, of New York, whereby Dr. Rusby was to be paid a compensation for his services at a higher rate than was authorized by law. In the judgment of your committee the clearest and most concise statement of the charges made against Dr. Wiley and the other officials involved is found in the testimony of Solicitor McCabe on page 423 of the hearings, and will appear from what follows:

Mr. FLOYD. Now, I want to ask you some questions about the proceedings in the department against Dr. Wiley, and I will ask you to state to the committee the specific charge, as you understand it, that is lodged against Dr. Wiley involving any illegality or improper conduct. I would like to have it stated. Of course I have read the statement and report, but in a clear and concise way I would like to have your statement.

Mr. McCABE. I think the conclusion and finding of the committee on personnel was this: That Dr. Rusby, Dr. Bigelow, Dr. Kebler, and Dr. Wiley had agreed, which agreement was not disclosed to the Secretary, that Dr. Rusby should not be required to work more than 80 days per year, and that for that work he was to receive a compensation of \$1,600, which the committee on personnel believed was an unlawful rate in view of the limitation in the appropriation act on the salaries paid scientific investigators in connection with the provisions of section 2687, Revised Statutes, which the Attorney General had construed to forbid a maximum pro rata greater than a rate which, if continued throughout the year, would amount to more than the salary fixed by law.

In the discharge of its duty under the rules of the House of Representatives, your committee made a patient and careful investigation of this whole controversy, and the report of our hearings, comprising several hundred pages of printed evidence, is transmitted herewith for your information and for such action as may seem, in the judgment of the House, proper to be taken.

Your committee regards the "Wiley investigation," so called, only an incident in its broader inquiry into the organization and administrative routine of the Bureau of Chemistry and of the Referee Board. We have, however, incorporated the printed charges against the accused officials in the record of our proceedings and have epitomized them in this report. A spirit both of fairness to them and of justice to ourselves demands that we should record our conclusions in this report.

It is the opinion of the committee that the Rusby contract is of doubtful administrative policy and should be held to be invalid. We fail to find from the evidence in the whole case that there existed any secret agreement or that the terms of compensation or rates to be paid Dr. Rusby were withheld from the Secretary designedly or otherwise. It appears from the testimony of Dr. Wiley that the rates of Dr. Rusby's compensation were explained to the Secretary and the reasons therefor given, at the time of his appointment. All letters and correspondence, with carbon copies thereof, bearing upon this contract or agreement were carefully preserved by each of the parties aforesaid in the files of their respective offices and were forthcoming when called for by the Secretary and are now published in full in these hearings.

We therefore find from the evidence adduced that the charges of conspiracy have not been established, but on the contrary, that the accused officials were actuated throughout solely by a desire to procure for the Bureau of Chemistry an efficient assistant in the person of Dr. H. H. Rusby under terms and conditions which those officials believed to be in entire accord with the law, regulations and practice of the Department of Agriculture.

The causes which impelled Dr. Wiley to arrange this form of contract to secure the services of Dr. Rusby were adverted

to by the President in his letter of September 14, 1911, to Secretary Wilson dealing with the questions arising under this contract, as follows:

The truth is, the limitations upon the bureau chiefs and heads of departments to exact per diem compensation for the employment of experts in such cases as this is of doubtful legislative policy. Here is the pure-food act, which is of the highest importance to enforce and in respect to which the interests opposed to its enforcement are likely to have all the money at their command needed to secure the most effective expert evidence. The Government ought not to be at a disadvantage in this regard, and one can not withhold one's sympathy with an earnest effort on the part of Dr. Wiley to pay proper compensation and secure expert assistance in the enforcement of so important a statute, certainly in the beginning, when questions arising under it are of capital importance to the public.

While giving full adherence to this statement of the President of the importance of this phase of this matter and that the Government should be enabled to make an effective prosecution of violation of the pure-food law, your committee respectfully suggests that the Rusby situation is not a result of a legislative policy but arises from an executive order issued by Secretary Wilson, as appears from the following (p. 894):

Mr. HIGGINS. I want to ask you for my own information about the general matter of the employment of experts. Has there been any difficulty experienced by the department in the employment of experts in courts?

Secretary WILSON. Experts for the courts?

Mr. HIGGINS. Yes.

Secretary WILSON. Yes; there is. At that very coca-cola case this question came up to me. Dr. Wiley had engaged a Boston man at a thousand dollars, and when the thing was over he wanted expenses also, which would be \$300 more, and they brought that matter up to me. Finding that the man had been promised his thousand dollars and expenses, I said, "There is no way but to pay the man. We must make our word good to these scientists." But I took action at once, and I said to these people, "In the future, Dr. Wiley shall select the scientist and Mr. McCabe shall fix the compensation, and then there will be no dispute about what the man is to be paid."

Mr. HIGGINS. You followed that course after the fee of a thousand dollars and expenses were charged in that case?

Secretary WILSON. Yes. I wanted to use the scientific ability of Dr. Wiley in the selection of the man, but the moment he selected him the thing entirely came under McCabe. That is how that matter was determined.

Under the practice of the department the compensation of expert witnesses is made by special contract between the Solicitor and the expert without regard to any definite limit set by Congress; the record shows that such witnesses have been paid as much as \$1,000 for attending a trial and giving evidence for several days or a week. The disadvantage of Dr. Wiley to which the President referred in the matter of securing competent witnesses and of paying them proper compensation comes from the order of Secretary of Agriculture assigning to the Solicitor the duty of fixing the compensation of the men after they have been chosen by Dr. Wiley.

In the instance under discussion, Solicitor McCabe declined to sanction the payment of \$50 per diem to Dr. Rusby for appearance in court as an expert witness, and Dr. Rusby refused to accept a lower rate. Hence arose the deadlock.

Your committee is of the opinion that Congress should enact legislation which will define the qualifications of experts and regulate their fees and compensation, and which will remedy the disadvantages and difficulties arising under the present practice.

It is the opinion of your committee that a change in form of voucher by which payment is made to these experts will be in the interest of good administration. Under present practice, of the department it is practically impossible for a committee in making an examination of the expenditures of the depart-

ment to ascertain the rate per diem of payment to expert witnesses, even though the original vouchers were to be called for and read. The present practice in this regard is set forth in the following statement to your committee by Mr. Zappone, chief of accounts in the department:

The CHAIRMAN. When Dr. Boos's vouchers come to you for payment, will his compensation be in a lump sum, or will it indicate the rate he is paid by the day?

Mr. ZAPPONE. It will be in a lump sum for that particular service, just like any other contract; so much for the job. That voucher must have the approval of the solicitor of the department before I can pay it.

The CHAIRMAN. Then that voucher, if, in fact, there is a contract with Dr. Boos that he is to have \$65 a day for his services as a witness, we will say, when it comes to you and you pay it, that voucher will not show that he has been paid at the rate of \$65 a day; or will the voucher show that?

Mr. ZAPPONE. It will not show it. It will show it in the lump, so much for that particular service, including his miscellaneous expenses.

The CHAIRMAN. So it will be impossible by an examination of the voucher through which he is paid to ascertain at what rate per diem he receives his compensation?

Mr. ZAPPONE. Generally speaking, yes; but there is no reason why it could not show the rate if the miscellaneous expenses were known, and the facts in the case show that it was in the nature of a contract. The Attorney General has held that such witnesses are not employees, and therefore any arrangement entered into with them by the proper official of the department would be in the nature of a contract.

Your committee is of the opinion that it should be stated on the voucher the rate of compensation and the duration of service, so that an examination of the voucher will readily disclose the actual rate of compensation and the total expense account included in the payment.

The record shows that three members of the Referee Board were in attendance at the trial at Indianapolis, Ind., in the capacity of witnesses at the instance and on behalf of the plaintiffs in the suit, to wit, Curtice Bros. and Williams Bros., who are interested in the sale of foodstuffs to which soda benzoate has been added as a preservative, and that the expenses of these witnesses were paid by the Department of Agriculture. In the opinion of your committee, the payment of these expenses by the Department of Agriculture was wholly without warrant of law.

The hearings before your committee disclosed a condition of discord existing in the Bureau of Chemistry which has lowered the discipline, impaired the efficiency of the service, and has added to the cost of administration. These unfavorable conditions have not been occasioned by the execution of the Rusby contract under which only \$200.83 was disbursed, and it will require positive and well-considered reorganization to restore the efficient service to which the public is justly entitled. That this conclusion is shared by President Taft is evident from the following passage in his letter to Secretary Wilson disposing of the charges of the committee on personnel in relation to the evidence introduced before your committee:

The President says:

Further consideration satisfies me that there are very much broader questions involved in the investigation and the evidence there brought out than in the present charge, which is narrow and definite and can be properly disposed of. The broader issues raised by the investigation, which have a much weightier relation than this one to the general efficiency of the department, may require much more radical action than the question I have here considered and decided.

These broader questions, in the judgment of your committee, simply stated, are the proper interpretation of the provisions of the pure-food law and efficient methods in its administration. This will involve a review of the general policy of the Secretary in relation to the administration of the law and a discussion of the respective powers and duties which are assigned to the Secretary of Agriculture, the Bureau of Chemistry, and the Federal judiciary, under section 4 of the law.

Your committee does not question the motives or the sincerity of the Secretary of Agriculture, whose long service as the head of the Department of Agriculture has been of signal service to the American people. From the beginning, however, the honorable Secretary has apparently assumed that his duties in the proper enforcement of the pure-food law are judicial in character, whereas in fact they are wholly adminis-

trative and ministerial. This misconstruction of the law is fundamental and has resulted in a complex organization within the Department of Agriculture, in the creation of offices and boards to which have been given, through Executive order, power to overrule or annul the findings of the Bureau of Chemistry.

The statute created the Bureau of Chemistry as an agency to collect evidence of violations of the food and drug act and to submit this evidence duly verified to the Department of Justice for judicial action. The Secretary of Agriculture is the officer whose duty it is to transmit this evidence from the Bureau of Chemistry to the Department of Justice. Added to this simple duty is the more responsible obligation delegated to him by the three Secretaries, to review the findings of the Bureau of Chemistry by granting a hearing to parties from whom samples were collected and in the light of these hearings, of deciding whether or not the findings of the bureau are free from error.

This construction of the law, which, in the opinion of your committee, is the correct one, places the judicial determination of all disputes in the courts, where the standard of purity in foods must finally be established. It also makes it the imperative duty of district attorneys to proceed against all violators of the law on receipt of certified record of cases prepared by the Bureau of Chemistry; but if we accept this construction of the law in its full meaning, it is apparent that at the time of the taking effect of this law the prompt prosecution of every infraction, whether of major or minor importance, was an impossibility, as such a course would have utterly congested the business of the courts.

The initial plan of the administration adopted by the Secretary is well defined in the following statement, made by the Secretary before your committee:

Secretary WILSON. It occurred directly to me that something of that kind would have to be resorted to. I went out to the Pacific coast, I think it was in 1907, to look into the forests that had just come to our department. Telegrams began to come all around me, and finally reached me that something was seriously the matter at San Francisco, and I wired back that I would be there at a certain day, and I went there. I found the mayor, the bankers, the business men, and the farmers in a very great commotion. They wanted me to talk. I said, "I do not know what to say. I will listen; you talk, gentlemen." "Well," they said, "we have a \$15,000,000 industry here in the growing and drying of fruits. These dried fruits are contracted for by the big eastern merchants. Our people borrow money from the banks, etc., and when the fruit is sold everything is straightened out and things go on, but you people in Washington say that we can only use 350 milligrams of sulphur to the kilo, and the eastern men who have contracted for our fruit will not make their contracts good; they are afraid it will not keep."

While I had issued that myself, I did not know any better. I had not knowledge enough about those things; I am not a technical chemist, and I took what the Food and Drug Board advised. After listening to those good people all day I said: "I see the condition you are in, gentlemen. I do not think the American Congress in making this law intended to stop your business. We have not learned quite enough in Washington to guide your business without destroying it. We will know better by and by, but I will tell you what to do. Just go on as you used to go on and I will not take any action to seize your goods or let them be seized, or take any case into court until we know more about the number of milligrams to the kilo and all that. In the meanwhile I shall send a chemist from our Bureau of Chemistry out here, and I want to get the best chemist you have in your State, at your State university at Berkeley, put the two together and we will try to get the facts," and we did that. They worked that summer; and before, I think, they completed all they would have liked to have done, the Referee Board came. It became evident that some of those questions should be referred to the foremost chemist in the land. That was the conclusion of President Roosevelt and it was my conclusion. I think that about answers the question why the board was created. That is an illustration. The same thing happened in New Orleans, where they make sugar and molasses. They were afraid of stopping the whole business. (See p. 846.)

Thus the administration of the law began with a policy of

negotiation and compromise between the Secretary and the purveyors of our national food supplies.

It is a matter for profound congratulation that the great body of American citizenship yield prompt and willing obedience to the law, and to such it was only required that the terms of the law be fully explained. The necessary readjustment of their business required time, and it was good administration to grant reasonable opportunity for such a purpose.

There are others who are reluctant or defiant, to whom delay means license for continued offending. It is a matter of common knowledge that large business concerns in this country have frequently refused to submit to the guidance of the law without a struggle, and to such of these as were engaged in the purveyance of foods the passage of this law was in the nature of a challenge. It was a notice that in this country there is no question too important to be submitted to the courts for arbitrament. Our courts determine the traffic charges on our railroads, appoint receivers for the largest corporations, and dissolve the most giant combinations of capital; and the tribunals which protect life, preserve liberty, safeguard invested capital, and promote legitimate business enterprises throughout our Nation can be safely intrusted to discharge the duties imposed upon them by this legislation.

The standard of purity of food will never be determined with absolute finality. This standard will represent at any given moment the sum of our national knowledge on this subject, and as we extend our scientific research, and thus add to the sum of our knowledge on this subject, this standard will necessarily vary; but Congress, in enacting this law, did not provide that its provisions shall remain in abeyance until we shall have completed any given course of scientific research. The problems arising under its administration today are intended to be determined according to our civilization of today.

The Secretary stands on safe grounds in asserting that "we will know better by and by," but the law is in force today and was enacted to give proper protection to the consumer as well as the producer. The pure-food law vests in the Federal courts the power to decide whether or not a particular commodity is adulterated or misbranded within the meaning of the law, and refers controversies arising under the operation of this law to these courts for final adjudication. The strength of the statutes and the jurisdiction of the courts can not be affected by the executive orders of the Secretary of Agriculture, though they be issued in obedience to the suggestion of the President of the United States.

Section 4 of the pure-food law is as follows:

Section 4. That the examinations of specimens of foods and drugs shall be made in the Bureau of Chemistry of the Department of Agriculture, or under the direction and supervision of such bureau, for the purpose of determining from such examinations whether such articles are adulterated or misbranded within the meaning of this act; and if it shall appear from any such examination that any of such specimens is adulterated or misbranded within the meaning of this act, the Secretary of Agriculture shall cause notice thereof to be given to the party from whom such sample was obtained. Any party so notified shall be given an opportunity to be heard, under such rules and regulations as may be prescribed as aforesaid, and if it appears that any of the provisions of this act have been violated by such party, then the Secretary of Agriculture shall at once certify the facts to the proper United States district attorney, with a copy of the results of the analysis or the examination of such article duly authenticated by the analyst or officer making such examination, under the oath of such officer. After judgment of the court, notice shall be given by publication in such manner as may be prescribed by the rules and regulations aforesaid.

The Bureau of Chemistry is in the Department of Agriculture, and is therefore subject to the general authority of the Secretary of Agriculture; but the language in this section gives specific instructions to the Bureau of Chemistry in defining the duties of the bureau under the law; likewise the duties of the Secretary of Agriculture are carefully differentiated from those of the Bureau of Chemistry and are set forth with equal precision. In the discharge of their respective duties under this section these officials are therefore acting within spheres defined by law which can not be changed by Executive orders. It is the duty of the Bureau of Chemistry to make examinations of specimens of foods and drugs for the purpose of determining whether or not such specimens are adulterated or misbranded within the meaning of the law. This is the peculiar and exclusive duty of the Bureau of Chemistry, as defined by the express terms of the law.

The Secretary of Agriculture is charged with the duty of giving the parties from whom samples are obtained notice of the findings of the bureau, if such samples have been found to be adulterated or misbranded within the meaning of the act, and of certifying the facts to the proper district attorney, with a copy of the results of the analysis or examination of such article, duly authenticated by the analyst or officer making such examination, under the oath of such officer. These respective duties of the Secretary and bureau are enumerated separately in the statute, and whatever other duties either may be charged with in the administration of the act come by virtue of the rules and regulations which may be established by the Secretary of the Treasury, the Secretary of Agriculture, and the Secretary of Commerce and Labor, under the powers given them jointly in section 3 of the law. The regulations established by these three Secretaries direct that the second hearing shall be held "before the Secretary of Agriculture, or such other official connected with the food and drug inspection service as may be commissioned by him for that purpose." It is in the exercise of this delegated power, in the opinion of your committee, that one of the chief difficulties in the administration of the law has had its origin.

To this official or official board that is commissioned by the Secretary of Agriculture to conduct these hearings is given the power to abate the findings of the Bureau of Chemistry and thus prevent the cases from being certified to the Federal courts for prosecution.

Secretary Wilson delegated this power of review to a Board of Food and Drug Inspection, with a membership composed of Dr. Wiley, Dr. Dunlap and Solicitor McCabe. The membership of this board have been unable to work in harmonious relationship. In speaking of the attitude of his associate members of the board toward him, Dr. Wiley gave your committee the following statement:

Mr. FLOYD. In view of that statement I want to ask you this question: What has been the attitude of your colleagues on this board toward yourself? Have they co-operated with you or have they generally been antagonistic to you?

Dr. WILEY. They have generally been antagonistic. They have joined me, however, in a great many cases, as I have said—about one-third of the whole number of cases; but in the other two-thirds they have been antagonistic (p. 766).

It is submitted by your committee that an inability of the Board of Food and Drug Inspection to affirm approximately but one-third of the cases recommended by the Bureau of Chemistry would suggest inquiry and demand a remedy. The evidence shows that a large number of cases were prepared and afterwards abated.

The importance of this phase of the administration of the pure-food law from a fiscal viewpoint is seen in a statement prepared for your committee by Dr. Wiley that the total cost to the Government of preparing the whole number of cases which has been abated by the Board of Food and Drug Inspection is \$1,190,784. (See table, p. 789.) It does not require comment to sustain a conviction that either too many cases were prepared in the Bureau of Chemistry or too many of these cases were abated in the Board of Food and Drug Inspection. Your committee is of the opinion that it is a wise provision of the law which gives a person whose product is accused of adulteration or fraud an opportunity to appear and place that product in the most favorable position before the reviewing board, as provided for in the regulations issued by the three Secretaries.

Frequently it is possible to adjust the practice of the purveyor to conform to the spirit of the law, and, from the record before it, your committee is convinced that many such cases appear among the large number of abated cases of which comment has been made. Where this has been the result, it is not generous to say that money spent in the preparation thereof has been squandered or that the purpose of the law has been defeated.

The reviewing authority should possess scientific attainment of high order. These attributes can be secured more certainly in a composite board than in an individual, but the associate membership should be able to work together in substantial agreement. For this reason your committee believes that the Board of Food and Drug Inspection should consist of the chief of the Bureau of Chemistry and two associates within the Bureau of Chemistry, sitting with equal power as board members. These officers are very properly subject to removal by the appointing powers, and this suggests the proper remedy for incompetency or overzeal.

Dr. Dunlap is associate chemist in the Bureau of Chemistry and is also acting chief of the bureau in the absence of the

chief. The authority and rank of associate chemist is not well defined in the order of appointment or in the practice of the department. In his statement of his rank to your committee, Dr. Dunlap said that he was not over Dr. Wiley nor was not under him; that is, that he was not subject to his instructions. Dr. Wiley stated that he considered Dr. Dunlap to be his (Wiley's) superior; and Secretary Wilson, while stating that he considered Dr. Wiley to be Dr. Dunlap's superior in the Bureau of Chemistry, failed to specify any particular duty which Dr. Dunlap would be obligated to do at the instance of Dr. Wiley as his superior officer. Secretary Wilson's order to Dr. Wiley defining his relations to Dr. Dunlap is as follows:

APRIL 21, 1907.

DEAR DR. WILEY: I have decided to create a board of food and drug inspection to report decisions to me for approval and to perform the other duties mentioned in the inclosed general order. I have had this matter under discussion with the President for some time past, and over a month ago he approved the idea. You will be chairman of the board, the second member will be Prof. Frederick L. Dunlap, late instructor in organic chemistry in the University of Michigan, and the third member will be Mr. George P. McCabe, Solicitor of the department. With the consent of the President, Prof. Dunlap has been appointed associate chemist and member of the board of pure-food inspection. You will please extend to Prof. Dunlap facilities to consider all correspondence and to overlook any investigations under the food and drugs act conducted by the Bureau of Chemistry, to make any independent investigations or determinations he may see fit, and to go to such places in the United States as he may desire to visit where foods and drugs and articles used in the manufacture thereof are in the process of making. Inasmuch as both yourself and Mr. McCabe report directly to me, I think it wise that Prof. Dunlap should do the same. I shall expect you, as chairman of the board, to organize its work and to perfect details of operation, the same to be reported to me for approval, the central idea being that I shall look to you and to Prof. Dunlap for the facts and to Mr. McCabe for the law. It is my idea that there should be very frequent meetings of this board in order that decisions may be reported to me promptly. Expedition is necessary to secure efficiency in the enforcement of the law, and is a matter of fairness to the manufacturers of foods and drugs. With the assistance of Prof. Dunlap the Bureau of Chemistry will, doubtless, be able to make determinations with greater expedition than has been the case in the past.

It is not my idea that Prof. Dunlap should be connected with the administrative work of the Bureau of Chemistry, except as indicated in this letter and in General Order No. 111. You will provide him with the necessary quarters, clerical force, etc.

Very truly yours, JAMES WILSON, *Secretary*.

Dr. H. W. WILEY,

Chief Bureau of Chemistry.

I certify this to be a true copy.

F. B. LINTON, *Chief Clerk*.

The vesting of two officials within the same bureau with so nearly independent and coordinate powers can not be conducive to harmonious relationship or unity of purpose and action.

Congress created the office of chief of bureau and vested it with the authority over the bureau which that rank usually implies. Any office which is created within the bureau by executive order should be essentially inferior to that of the chief. The creation of an "associate" with no administrative duties except to consider all correspondence, to overlook such investigations as the associate may see fit, and to undertake such travel in the United States as the associate officer may desire, with the privilege of reporting directly to the Secretary rather than through the chief, his superior officer, presents, in the opinion of your committee, a remarkable exercise of executive discretion. It is the opinion of your committee that discipline will not be restored, the highest efficiency secured, and economy in administration best promoted until this anomalous condition is rectified by clearly defining the duties of associate chemist.

GENERAL ORDER NO. 110.

The duties of the Solicitor of the Department of Agriculture, as defined in the original order appointing Mr. McCabe to that position, are as follows:

APPOINTMENT AND DUTIES OF THE SOLICITOR.
General Order No. 85.

UNITED STATES DEPARTMENT OF AGRICULTURE,

OFFICE OF THE SECRETARY.

Washington, D. C., June 17, 1905.

Mr. George P. McCabe has been appointed Solicitor of the Department of Agriculture, effective July 1, 1905. He will act as the legal adviser of the Secretary, and is charged with the preparation and supervision of all legal papers to which the department is a party, and of all communications to the Department of Justice, and to the various officers thereof, including United States attorneys. He will examine and approve, in advance of issue, all orders and regulations promulgated by the Secretary under statutory authority. He will represent the department in all legal proceedings arising under the various laws intrusted to the department for execution. He will prosecute applications of employees of the department for patents, under the terms of department circular No. 3, 1905. His duties will be performed under the immediate supervision of the Secretary.

JAMES WILSON, *Secretary*.

This order was supplemented by General Order No. 140, issued June 9, 1910, which, so far as it relates to the Bureau of Chemistry, is as follows:

DUTIES OF THE SOLICITOR.

The act of Congress approved May 26, 1910, contains the following provision:

"Hereafter the legal work of the Department of Agriculture shall be performed under the supervision and direction of the Solicitor."

To carry into effect this provision of law it is hereby ordered that the legal work of the various bureaus, offices, and divisions of this department shall hereafter be conducted as follows:

5. *Bureau of Chemistry.*—The legal work of the Bureau of Chemistry, including the drafting of agreements and all other matters on which legal advice is necessary, shall be referred to the Solicitor. In accordance with section 4 of the food and drugs act of June 30, 1906 (34 Stats., 768), the examination of foods and drugs, in connection with the enforcement of the act, shall be made in the Bureau of Chemistry. After such examinations all the evidence in all cases, with such summaries to be prepared by the Bureau of Chemistry as the Solicitor shall prescribe, shall be referred to the Solicitor to determine whether a prima facie case has been made and to recommend to the Secretary whether citation to a hearing shall issue. In all cases where citations issue the Solicitor will prescribe the form and manner of issuing and the parties to whom citations shall issue. Hearings will be held by or under the supervision of the Board of Food and Drug Inspection, as heretofore. In every instance, after a hearing has been held or an opportunity for a hearing afforded, the case, including all papers in reference thereto, together with such summaries as the Bureau of Chemistry shall prepare at the direction of the Solicitor, shall be submitted to the Solicitor, for recommendation to the Secretary as to whether the case shall be reported to the Department of Justice for prosecution. The Board of Food and Drug Inspection will submit to the Solicitor, for recommendation to the Secretary, all proposed seizures to be effected under section 10 of the food and drugs act. The board shall also submit to the Solicitor all the evidence in its possession at the time seizures are proposed, and shall report to him promptly all facts which may develop subsequently in regard thereto. The Solicitor will continue, as heretofore, to prepare the notices of judgment authorized under section 4 of the statute, and will have general supervision of the preparation of all food-inspection decisions issued from time to time. No recommendation relative to the legal side of any case arising under the food and drugs act shall be made to any officer of the Department of Justice, nor shall communications, oral or written, be addressed to any officer of the executive departments regarding matters arising in connection with acts of Congress with which this department is concerned, except with the approval of the Solicitor, obtained in advance.

This order shall take effect July 1, 1910. It supplements General Order 85, dated June 17, 1905, which is continued in full force and effect.

JAMES WILSON,

Secretary of Agriculture.

JUNE 9, 1910.

This general order is based by the Secretary on the following language of the agricultural appropriation bill of 1910:

Hereafter the legal work of the Department of Agriculture shall be performed under the supervision and direction of the Solicitor.

In the practice of the department it has the effect to give the Solicitor the special control over the preparation of cases for presentment to the Department of Justice which was vested in the Board of Food and Drugs Inspection, this control including the power to abate the cases prepared in the Bureau of Chemistry.

As this change is of great consequence in the administration of the law, your committee gave this feature careful attention and is of the opinion that the provisions of said order extending to the solicitor the special control of prosecutions in so far as said order seeks to contravene or modify the terms of the rules and regulations adopted and promulgated by the three Secretaries and which are found in divisions (a) and (b), regulation 5, is not within the grant of power of the agricultural appropriation act of 1910. Divisions (a) and (b) are as follows:

(a) When the examination or analysis show that the provisions of the food and drugs act, June 30, 1906, have been violated, notice of that fact, together with a copy of the findings, shall be furnished to the party or parties from whom the samples were obtained or who executed the guaranty as provided in the food and drug act, June 30, 1906, and a date shall be fixed at which such party or parties may be heard before the Secretary of Agriculture, or such other official connected with the Food and Drug Inspection Service as may be commissioned by him for that purpose. The hearings shall be had at a place, to be designated by the Secretary of Agriculture, most convenient for all parties concerned. These hearings shall be private and confined to questions of fact. The parties interested therein may appear in person or by attorney and may propound proper interrogatories and submit oral or written evidence to show any fault or error in the findings of the analyst or examiner. The Secretary of Agriculture may order a reexamination of the sample or have new samples drawn for further examination.

(b) If the examination or analysis be found correct the Secretary of Agriculture shall give notice to the United States district attorney as prescribed.

If this order be not invalid, it should be modified in the interest of economical and efficient administration, (a) because it gives the Solicitor too dominant power over the important administrative function of issuing or not issuing notices to a hearing and of certifying the cases to the Department of Justice after the hearings have been given; and (b) because it increases the cost of administration without correspondingly increasing the efficiency of the service.

Under the regulations of the three Secretaries, the findings of the Bureau of Chemistry can be reviewed legally only by the Secretary of Agriculture or by the Board of Food and Drug Inspection which was organized by him for that purpose. When the examination made by the Bureau of Chemistry shows that the article is misbranded or adulterated, within the meaning of the law, the Bureau of Chemistry passes the case to the Board of Food and Drug Inspection and a notice of the findings is given the party from whom the sample was obtained, fixing a time and place at which a hearing is to be given. If this hearing discloses that the analysis or examination made by the Bureau of Chemistry is correct, the Secretary of Agriculture is required to give notice to the district attorney as prescribed, and the action of the Department of Agriculture ceases in the case, the control passing to the Department of Justice.

Under the terms of this order all the evidence in all cases examined in the Bureau of Chemistry, together with such summaries as the Solicitor may prescribe, is referred to the Solicitor to determine whether or not a prima facie case has been made. The evidence before your committee establishes that only one case in three which are examined in the Bureau of Chemistry presents evidence of adulteration or misbranding within the meaning of the law. Under the regulations cases not disclosing adulteration or misbranding should be dropped in the bureau, which, in the opinion of your committee, is the proper disposition to be made of them. We are at a loss to understand what favorable results can come from the preparation of such summaries in the Bureau of Chemistry and their further study in the Solicitor's office. Your committee is therefore of the opinion that general order No. 140 should be modified accordingly by the honorable Secretary.

THE REFEREE BOARD.

The Referee Board is not authorized by any express provision of the statute, but was created by Executive order of President Roosevelt. Your committee has inquired particularly into the origin of the board, the reasons for its creation, the nature and character of its work, the effect of its decisions, the scope and extent of its investigations, and the expense incurred thereby in conducting the same. The formal inquiries made by your committee concerning it and the response of the honorable Secretary of Agriculture thereto are shown in the following extract from the hearings on pages 187 to 189, inclusive, to wit:

JULY 20, 1911.

Hon. JAMES WILSON,

Secretary of Agriculture, Washington, D. C.

SIR: I have the honor to call your attention to the inclosed resolution which was adopted by the Committee on Expenditures in the Department of Agriculture in their session today. In compliance with the terms thereof, I respectfully ask that our committee be given this data at the very earliest moment. I will appreciate prompt co-operation on the part of your department in the work of placing this information before the committee without material delay.

Very respectfully submitted,

RALPH W. MOSS, *Chairman.*

Mr. Floyd offered the following resolution, which was unanimously adopted:

Resolved, That the chairman of this committee be, and he hereby is, authorized and requested to call upon the honorable Secretary of Agriculture for a true, full, and complete report concerning the organization of the Remsen Board; the members of said board who have served at any time during the period of its existence; the titles by which the individual members are legally known; the salary or other compensation paid to each member, including any allowance for expenses of whatever kind; any changes in the rate of compensation paid to any member or employee of said board or of the legal designation of such member or employee, together with any change in the duties with which he is charged by the terms of his appointment; the names, rate of compensation, legal title of employment of any and all employees, agents, or experts which have been employed by the said board or who have been paid to assist them in the performance of their duties; a separate statement of the expense account of each such agent, expert, or employee; the total sum paid each such employee, agent, or expert as salary and as expenses; a statement of the total amount of money expended annually by reason of the creation and operation of said Remsen or Referee Board.

Resolved, further, That the honorable Secretary of Agriculture be requested to supply this committee a complete list of all matters and questions at issue in the department which have been submitted to the said Remsen Board for determination, and a complete list of the cases which have been decided by said board, and a copy of the decision in each case so decided.

RALPH W. MOSS, *Chairman.*

Attest:

F. J. CRAWFORD, *Clerk.*

DEPARTMENT OF AGRICULTURE,

OFFICE OF THE SECRETARY,

Washington, July 24, 1911.

Hon. RALPH W. MOSS,

Chairman Committee on Expenditures in the Department of Agriculture, House of Representatives.

SIR: In answer to your letter of July 20, inclosing a resolution which was adopted by the Committee on Expenditures in the Department of Agriculture in regard to the Referee Board, I have the honor to inclose herewith a statement containing the information desired. Very respectfully,

JAMES WILSON, *Secretary.*
K.

(Inclosures.)

REFEREE BOARD.

Reason for organizing the board.—The Referee Board was organized to assist the Secretary of Agriculture in determining the wholesomeness or the deleterious character of such foods, or of such articles used in foods, as he might refer to them for consideration and report. The collection and examination of

samples are made by the Bureau of Chemistry, but the enforcement of the law is with the Secretary of Agriculture, and it is necessary for him to know definitely whether certain articles are deleterious or not, and where there is grave conflict of scientific opinion on the question, he refers the subject to this board.

When and by whom created.—The Referee Board was created because certain farmers growing fruit on the Pacific coast, and certain manufacturers of food-stuffs, asked President Roosevelt to select a number of disinterested scientific men to pass upon the harmfulness of sulphur dioxide, saccharin, and benzoate of soda. Other great farming industries were also vitally interested in the formation of this board, notably the farmers owning vineyards and the great sugar-cane growers of our South. President Roosevelt, after correspondence with the presidents of a number of the leading universities of the country, finally selected five men for membership on the board, and by his direction the Secretary appointed them as consulting scientific experts on February 20, 1908, and on February 24, 1908, organized them into a board called the Referee Board, as follows:

Dr. Ira Remsen, Johns Hopkins University, chairman.

Dr. Russell H. Chittenden, Sheffield Scientific School, Yale University.

Dr. C. A. Herter, Columbia University, New York, Rockefeller Institute of Scientific Research. (Dr. Herter has since died and has been replaced by Dr. Theobald Smith, Harvard Medical School, Boston, Mass.)

Dr. John H. Long, Northwestern University (medical school) Chicago.

Dr. A. E. Taylor, University of California, Berkeley, Cal.

By what authority.—Authority for the appointment of the members of the Referee Board is contained in a provision of the agricultural bill, which provides that—

"Hereafter the Secretary of Agriculture is authorized to make such appointments, promotions, and changes in salaries to be paid out of the lump funds of the several bureaus and divisions and offices of the department as may be for the best interests of the service." (34 Stat., 1280.)

The members of the Referee Board are paid from the appropriation for enforcing the food and drugs act, which contains the following provision:

"Employing such assistants, clerks, and other persons as the Secretary of Agriculture may consider necessary for the purposes named." (34 Stat., 1272.)

The authority of the Secretary of Agriculture to organize these consulting scientific experts into a board is contained in section 161, Revised Statutes, which authorizes the head of each department to prescribe regulations for the government of his department.

That the Secretary of Agriculture had sufficient warrant of law to appoint this board has been attested in a decision of the Attorney General, under date of April 14, 1909.

Questions submitted to board and decisions rendered.—The Referee Board has had sent to them for final determination the following:

1. Sodium benzoate.
2. Sulphur.
3. Copper.
4. Saccharin.
5. Aluminum compounds.

The board has reported on sodium benzoate, as per Report No. 88 and Bulletin F. I. D. No. 104, copies of which are herewith. The board has also reported on saccharin, as per Bulletin F. I. D. No. 135, and minor report on which the bulletin was based, copies of which are herewith. The full report on saccharin is now in the hands of the printer and is not available at the present time.

Expenses of the Referee Board.—The expenses of the Referee Board are given in the accompanying statement. Respectfully,

JAMES WILSON,
Secretary of Agriculture.

JULY 24, 1911.

An itemized statement of the expense incurred by the Referee Board including the salaries paid the members thereof, was furnished your committee under the direction of the

honorable Secretary, and appears in full in the hearings on pages 194 to 221, inclusive.

The grand total of all expenses incurred in maintaining this board during the fiscal years 1908, 1909, 1910, and 1911 to date of July 28, 1911, is given as \$175,527.92. (See p. 221.)

Your committee also inquired into the legal authority for the creation of the Referee Board as at present constituted. We found that the question of its legality had been raised even in the Department of Agriculture. In the Department of Justice, Assistant Attorney General Fowler prepared a formal opinion, in which he holds that there is no legal authority for its creation and maintenance; but the Fowler opinion was not adopted as the opinion of the Department of Justice. This opinion appears in full in the hearings at pages 265 to 270, inclusive. Solicitor George P. McCabe, of the Department of Agriculture, in a memorandum prepared for the Department of Justice, holds that the board is legally created. This opinion is given in full in the hearings at pages 444 to 451, inclusive. The honorable Attorney General, Mr. Wickersham, has given an opinion sustaining the validity of the appointment, creation, and maintenance of the board. His opinion appears in full on pages 440 to 443, inclusive.

In considering the legal status of the Referee Board it is important that we should understand the exact manner of the appointment and designation of its several members. The persons composing this board were appointed separately and are designated in their appointment as consulting scientific experts. After being thus appointed, they were organized into a board to decide such scientific questions as might from time to time be submitted to it for determination by the honorable Secretary of Agriculture. Section 161 of the Revised Statutes gives wide latitude to the heads of the several departments mentioned therein in the administration of their affairs. The act of Congress approved March 4, 1907, contains this provision:

And hereafter the Secretary of Agriculture is hereby authorized to make such appointments, promotions, and changes in salaries, to be paid out of the lump funds of the several bureaus, divisions, and offices of the department, as may be for the best interests of the service. (34 Stat., 1280.)

In view of these provisions of law, your committee is of the opinion that there may be authority under the law for the creation and maintenance of such board to aid the Secretary in the discharge of any duty enjoined on him in his official capacity, but raises the question as to its legality on the sole ground that the determination of the general questions submitted by the Secretary to the Referee Board is not enjoined upon him under the law.

We have here presented the very crux of the controversy which has been waged over the terms of the pure-food law and which, fortunately for your committee, has been recently discussed in a decision of the Supreme Court in the case of *United States v. Morgan et al.*

This decision was handed down December 11, 1911, and your committee has given its terms much weight in the discussions and conclusions contained in this report.

(The decision referred to will be found on another page of this edition of the AMERICAN FOOD JOURNAL.)

The weight of this decision clearly denies to the Department of Agriculture any judicial authority, and even deprives the Bureau of Chemistry of the exclusive right to initiate prosecutions before the Federal courts for violations of the provisions of the act. The pure-food law is declared to be a general statute, the enforcement of which is made the duty of the judicial branch of the Government. The Bureau of Chemistry in the Department of Agriculture is but an additional agency to secure evidence of violation of the law and present it to the courts for prosecution.

We have thus presented another weighty question to be considered in this connection as to the necessity, wisdom, or sound policy of maintaining such a board at a heavy expense to the Government, when the work done by it is largely a duplication of work performed, or which might be performed, by the Bureau of Chemistry. The functions of this board as at present constituted are purely advisory. Their decisions have no legal or binding effect upon anybody. The Secretary can follow or ignore their recommendations as he sees fit. Their province and duty, as defined in the order creating the board, is to investigate such scientific questions as may be submitted to them by the Secretary and report to him their findings and opinions, and in practice they have investigated these several questions independently of any action of the Bureau of Chemistry and reported the results of their investigations, with their opinions, directly to the Secretary. They are merely the personal advisers of the Secretary on the scientific questions submitted to them for determination.

The honorable Secretary of Agriculture seems to have re-

garded the findings of this board as conclusive in all cases over the opinions and findings of the Bureau of Chemistry, the tribunal which by express terms of statute is vested with authority to determine the question of adulteration and misbranding within the meaning of the act. In the practice of the department the Bureau of Chemistry has been restrained from examining any specimens of foods and drugs under any general subject which is submitted to the Referee Board during the time of the examination of such question by such board; and if such general subject is submitted to the Referee Board before the Bureau of Chemistry has made any examination of specimens to determine the question of adulteration or misbranding, then the bureau is not permitted by the Secretary to make any such examination until the board shall have made its report.

It has resulted in another remarkable situation, viz, that under the practice of the department the decisions of the Bureau of Chemistry, if in opposition to the findings and opinions of the Referee Board, can not be referred to the courts and thus permit a judicial decision to be made, as is comprehended under the plain provision of the law. It would thus happen that if the Bureau of Chemistry were right and the Referee Board were in error that violations of the law would receive protection through the supposed enforcement of the law; because the effect of such a policy is to give this advisory board, created by Executive order, paramount authority over the Bureau of Chemistry and lodges in the personal advisers of the Secretary the power to annul the decisions of the bureau within the Department of Agriculture, which was created by law. That these are the actual results under the present procedure is evident from the following excerpts from our hearings:

Page 435:

Mr. FLOYD. I desire to ask you one more question about the effect of the decisions of the Referee Board and then I will pass on to another subject.

If the Bureau of Chemistry renders an opinion adverse to the use of a substance, urging that it is deleterious when used in food, and the Referee Board renders a different opinion holding that it is harmless and not deleterious—two scientific opinions different from each other—which one would control the action of the Secretary in that case?

Mr. McCABE. Should not that question be addressed to the Secretary?

Mr. FLOYD. Probably so. Now I will ask you which one has controlled or which one did control in the case of benzoate of soda?

Mr. McCABE. The decision of the Referee Board.

Mr. FLOYD. Now I will ask you in the event that the Referee Board should be in error in that decision and the decision of the Bureau of Chemistry should be correct, is there any way whereby you could get that case into court under your procedure so as to get a final adjudication of the matter in the courts?

Mr. McCABE. In practice, no.

Page 770:

Mr. FLOYD. Let me ask you this question, Dr. Wiley: If a substance that you have had under investigation in the Bureau of Chemistry and have determined is deleterious or injurious is referred to the Referee Board and your decision is reversed by the Referee Board, is there any way under the departmental procedure whereby their decision can be reviewed?

Dr. WILEY. By whom?

Mr. FLOYD. By anybody.

Dr. WILEY. Not to my knowledge.

Mr. HIGGINS. Whose decision—the Referee Board's?

Mr. FLOYD. Yes.

Mr. HIGGINS. That is, their findings as to whether it is deleterious or not?

Mr. FLOYD. Yes.

Mr. HIGGINS. It could be reviewed by the court, could it not, Doctor, in any action brought?

Dr. WILEY. I do not know by whom; not by the Bureau of Chemistry.

Mr. HIGGINS. No; but in any action brought?

Dr. WILEY. It might be brought by other people; yes.

Mr. FLOYD. I want to ask you about that. That is the point I am getting at, if you will pardon me, Mr. Higgins. That is the very point I want to make. Suppose the Bureau of Chemistry decides that a certain substance used in foods is injurious and deleterious to health, and makes a report adverse to it. Sup-

pose that is referred by the Secretary to the Referee Board and they hold to the contrary—namely, that it is harmless and not deleterious. In practice, is there any way whereby you can get that question into court and get the decision of the court?

Dr. WILEY. Not the Bureau of Chemistry. We are stopped at once.

Page 848:

Mr. FLOYD. Now, I am going to ask you a question that I would ask other witnesses as to the effect of the decision of the Referee Board. In case the Bureau of Chemistry should make a finding adverse to the use of a certain commodity on the ground that it was deleterious to health and that should be referred to the Referee Board and the Referee Board should make a contrary decision, is there any way, under the regulations, to your knowledge, that the question at issue between the Bureau of Chemistry and the Referee Board could be taken into the courts and be settled by the courts?

Secretary WILSON. Of course, I can not state intelligently with regard to how a thing might get into the courts, but the department would enforce the decision of the Referee Board. They would do that, I suppose—

Mr. FLOYD (interposing). If the decision of the Referee Board was adverse to that of the Bureau of Chemistry the effect of enforcing the decision of the Referee Board would be to prevent the prosecution of anyone using that commodity?

Secretary WILSON. Well, it would depend on—yes.

I see your point; yes, it would.

Having arrived at these conclusions concerning the Referee Board, your committee can not recommend its further maintenance under its present status. It is the opinion of your committee that a board exercising functions such as are exercised by the Referee Board, its decisions being given such far-reaching effects by the honorable Secretary, ought not to rest on the authority of an Executive order. If such board be deemed necessary or advisable in the proper administration of the pure-food law, its authority should be expressly conferred, its scope and jurisdiction clearly defined, and the effect of its decisions declared, by act of Congress.

While the committee are unanimous in their conclusions, they are not in full accord as to all of the reasons by which these conclusions are reached.

RALPH W. MOSS,
J. C. FLOYD,
R. L. DOUGHTON,
DANNITTE H. MAYS,
EDWIN W. HIGGINS,
BURTON L. FRENCH,
CHAS. H. SLOAN.

NEW KANSAS DAIRY REGULATIONS.

The following rules and regulations have been issued under the seal of the Kansas state dairy commissioner, and creamerymen and buttermakers should give them due consideration, as they are in the interest of better butter:

Rule 14 (Providing for weighing of cream samples)—The use of the pipette for measuring the amount of cream in testing is not approved. Persons testing cream shall weigh the sample accurately on a scale to be approved by the dairy commissioner. The weight of cream shall conform to the style of test bottle and shall be exactly 9 or 18 grams. This ruling shall take effect and be in force July 1, 1912. Any clean scale, sensitive to a drop of cream and at least one-tenth of a gram, is approved for cream testing purposes.

Rule 15 (Regulating the handling and sale of cream and milk in grocery stores)—Section 7 of the dairy law shall not be construed to prohibit the handling and sale of pure butter, cheese or other wholesome dairy products in sanitary and well-kept grocery stores, or other suitable places commonly used for the distribution of food products, providing that all milk and cream thus handled shall be kept at a temperature not exceeding 60 degrees F. and shall be received and sold in tightly capped bottles.

Rule 16 (Providing for the time of making payments for cream)—No person or persons, firm or corporation purchasing milk or cream by the Babcock test, shall pay for the milk or cream so purchased until after the Babcock test has been fully and accurately made according to section 5 of chapter 237 of the dairy law of Kansas, and in accordance with the instructions for drawing samples and conducting the test issued by the dairy commissioner. In no case shall any part of the sampling or testing, as prescribed by the dairy commissioner, be omitted or be carelessly or hastily performed.



ROPED AND TIED.

Illinois Sanitary Law Applied to Bakeries

Address Before the Illinois Master Bakers' Association at Alton, January 10, 1912, by John B. Newman, Assistant Food Commissioner of Illinois.

A new law was passed at a recent session of the legislature, effective July 1, 1911. It is entitled "An act to prevent the preparation, manufacture, packing, storing, or distributing of food, intended for sale, or sale of food, under insanitary, unhealthful or unclean conditions or surroundings, to create a sanitary inspection, to declare that such conditions shall constitute a nuisance, and to provide for the enforcement thereof."

You don't know what you are up against until you have read the law. The law provides that all buildings, basements or premises used as a bakery, confectionery, grocery store,

in order to note the conditions and tell you what they suggest you change, and if you ask them they will probably be pleased to tell you how to change them. You will then probably receive a written notice from the Food Commissioner.

Now, they will come around in a month or six weeks later and note what changes you have made, and if you have made no changes, and have no good reason for delay, they will give you a second written notice. After receiving the first notice, if you think it unjust, you have the right to appear before the Food Commissioner and show cause why within the times set in the order such changes should not be made. If in this hearing it develops that the rules, requirements or provisions of this law have not been disobeyed, the order will be withdrawn. If you have a good reason for not complying with the requirements an extension of time will be allowed you. If on receipt of the final order you fail or neglect to comply with its provisions within the time set in it, and have no good reason why extension of time shall be granted you, then the Commissioner will turn your case over to the state's attorney of the county under whose jurisdiction you are, and he will proceed against you for the violation of this law. The penalty for breaking this law is a fine or imprisonment, a fine ranging between ten and two hundred dollars for the first offense and for the second and subsequent offenses of from fifty to two hundred dollars, or by imprisonment of not more than ninety days, or both, at the discretion of the court. But with this last part we have nothing to do. That is the work of the state's attorney and the judge.

Now, we try to keep our investigations as confidential as we possibly can. We do not want to make public any thing or condition that will hurt anybody's business.

When we first went in we found conditions pretty bad throughout the state. I remember going into a place where the baker had a toilet room in the cellar where he was doing his baking, which is contrary to this law. It was a terrible place. There was no inclosure around it, and the place wasn't ventilated. We gave him instructions of what to do. On second inspection we found that he was cleaning up.

The newspaper men got rumor and wanted a story on it. But we did not give any account of it, preferring to keep it quiet until time expired within which he was to clean up.

The law requires, in reference to toilets, that in manufacturing establishments where foods are made and prepared, there shall be provided adequate and convenient toilet rooms, and lavatories. That the toilet room shall be separate and apart from the room where the manufacture of food products is carried on. That the floors on such toilet and lavatory shall be of non-absorbent material and be daily washed and scoured. That the toilets shall be fitted up with separate ventilating flues and pipes discharging into soil pipes or shall be on the outside of the building and well removed from it.

But outside of the cellar, rathole or basement bakery, the toilet proposition is the worst thing we have. Toilet rooms must be encased and separately ventilated.

Remember no person can sleep in any room where foods are manufactured unless the foods at all times are hermetically sealed in packages.

In regard to the delivery, we have had to stop some of the wagons and make the men clean out and the driver wash his hands and clean out his wagon before delivering further. I don't believe that any of you are strangers to the fact that bread is put in dirty wagons. You may know of instances where the drivers will go back to the toilet rooms, come out, take ahold of the old greasy reins, drive on and then pick up the bread with their dirty hands.

Bread is not like some food products that can be washed, at least, before eaten. Bread is eaten just as it is delivered. You are handling a food product in exactly the condition it goes into the system. If you are acquainted with the theory of bacteria you will readily see how numerous are the chances for contamination with this bread.

In some places there are attendants who watch everyone going into and coming from the toilet rooms and see that they wash their hands, and if the employe does not wash his



JOHN B. NEWMAN,
Assistant Food Commissioner of Illinois.

cannery packing house, creamery, cheese factory, or any manufacturing establishment used for the preparation, manufacture, storing, sale or distribution of any food shall be strictly clean and sanitary. All utensils shall be kept clean strictly, and shall be of such material that you can keep them clean.

The floors, sidewalls, ceilings, furniture, receptacles, implements and machinery, and all the trucks, vehicles used in transporting such goods must be kept in a clean and wholesome condition, and the sidewalls, ceilings and floors must be of a material that can easily be kept clean; the floors shall be impermeable, made of cement, or tile laid in cement, brick, wood, or any material which can be flushed clean with water. The employes must be healthful and clean, and this applies to the employes on the delivery wagons and vehicles for transportation.

The law provides that the inspectors shall visit your place

hands, and complains, he is forced to do so, and if he refuses is discharged.

Just think of the bacteria under the ordinary finger nail. I believe all of you, in handling your dough, use your hands and your fingers. And these germs are lasting. It has been reported of cases where typhoid fever germs have endured for years and contamination result from infection that occurred as high as forty-six years back. You will see that the importance of protecting bread going into the system from bacteria is very great. And I read of a case of a man from whom an epidemic started being created in a hospital for eliminating infection received years before, and which infection was the breeder of the epidemic.

If the finger nail is a carrier of typhoid germs the uninclosed closet is an incubator for them.

The law provides, and I would caution you to keep your buildings well screened to keep out flies. The fly is the best carrier of all kinds of disease. He is bred in the manure piles and filth. He walks around on the dung heaps and then flies in and promenades around on the dough or the bread and transfers the germs. One of the most important things is to keep your place well screened.

We visited a bakery in this state, a basement bakery, where the basement was lower than the sewer. There was a continual seepage under the floor into the bakery room. We called his attention to the unsanitary condition and requested him to remedy it. He said, 'I can't remedy it.' Then, we said, you will have to move upstairs.

We don't think that a basement bakery is the proper place for the manufacture and handling of a food as deserving of careful handling and protection as bread is. Bread and milk are two like products, in that they enter into the system in exactly the condition produced. The public, in many things, can at least protect themselves by washing the food, but in the case of bread and milk this cannot be done.

Of course, you can wrap up each individual loaf of bread. The law, however, does not really insist that bread shall be wrapped in this way; but it does insist that bread be handled and delivered in a sanitary manner. The bread can be protected by you in many ways from disease and poison-breeding germs. The driver can be made to wear gloves that can be cleaned. The dust blowing around is laden with germs, and if your wagon becomes dirty and filthy they give room for all sorts of infection of this nature entering into the loaves delivered.

We are going to get up a chart, containing the sanitary regulations that will aid you in impressing the importance on your employes of sanitation. We will have this placard printed and it will be put up in front of the employe, where he can see it, wherein it shall be stated what he is to do and what the law requires.

We have inspection blanks that closely resemble those used in the federal department.

I will say, where employes are affected with venereal disease or tuberculosis, they shall not be employed. We had a complaint in Chicago that about two years ago there was a young girl employed in a bakery who had tuberculosis. We went up and discovered that the young lady had left a few days previously; that the employer was aware of her having tuberculosis but hesitated in discharging her. That girl had to be discharged. Remember about this disease among employes.

The next item is cleanliness and dress of employes. Their clothing should be clean, and when they become soiled or dirty change them.

The next item is the cleanliness and provisions for health and comfort; admission of a certain amount of fresh air and sunshine; clean and sanitary condition of the toilet rooms in the factory and where located, and conditions and material of the walls and ceilings.

There is a general demand all over the country for a more rigid enforcement of all laws governing the manufacture, handling and sale of goods. It is just as important that an article should be guaranteed under the food laws to have been made, handled and sold in a sanitary manner as to guarantee that it has no added harmful or deleterious ingredient; and as important as the truthful labeling.

The benefits to the consuming public gained by having all bakeries sanitary are not so great as those benefits gained by the individual bakery or the industry as a whole.

You and your industry have everything to gain. Increased confidence of the consuming public, which means larger sales, greater volume of sales means gain in net profit, respectability and pride for your industry and your profession.

The elimination of the unclean and unscrupulous com-

petitor, the person who decreases your sales and limits your annual profits, is brought about. The careless, unsanitary baker who has brought odium deservedly to himself but undeservedly to you all, undeservedly to you only in so far as you support sanitary inspection and oppose his methods, is to be ousted.

Let the public know you do not agree with such greedy, unsanitary bakers. Repudiate him. Let the public know that bakers do not have to be forced to clean up. Advertise and prove by the condition of your plant that you are not only for and with the sanitary law, but part and parcel of it.

Invite the public, the housewife in particular, the local health officer, to visit your plant. Prove to them that bakery products are as clean as home made products. Never encourage, by acts nor words, any man to fight inspection; let him go it alone, and he will soon be very much alone. Without your support, without endorsement, he will be without customers, hence without business.

Don't think of this law as one on the books to make you do something that is a hardship, but as a blessing in disguise that will increase the volume of your business, increase your net profits, increase public faith in your business and pride in your vocation, and drive out your unscrupulous and undesirable competitor.

Your bakers have spent a great deal of time learning how to get the greatest number of loaves from a barrel of flour. Now strive one-half as hard to prove to the public that your place is sanitary, and that hence your products merit a place on the consumer's table. There are ten times as many people waiting, willing and anxious to patronize you when your places warrant their patronage as there are already patronizing them. Don't you want them? Cast off this back drag and drive on into this bigger business.

Public opinion can make or break you. When public opinion is for sanitary bakeries have such a bakery. Be with public opinion—under the wing of its approval. All your advertising is money wasted if you can't show your goods come from a sanitary shop. A reputation for sanitation will gain you more than an attractive ad, or attractive window display.

NEW YORK COMMISSIONER ASKS MORE STRINGENT LAW.

Recommendation that the agricultural law of New York be amended so as to make it illegal to misrepresent the quality of grade of any food product, as it is now illegal to misrepresent constituents, is made in the annual report of State Commissioner of Agriculture Raymond A. Pearson to the New York Legislature. This amendment, the Commissioner believes, "would serve to check the sale of stale products as fresh and would prevent the designation of milk as sanitary when it has not been produced in a manner to keep it clean and wholesome."

Commissioner Pearson also recommends that the law relating to the eradication of bovine tuberculosis be amended so as "to more definitely provide that herds known to have this disease shall be quarantined and no milk allowed to be used until all the animals showing physical signs of the disease have been removed."

"The facts concerning agricultural possibilities in the State of New York seem to be slowly but surely permeating the agricultural mind of the world," declares Mr. Pearson, "and the farm lands of the state are increasing in value proportionately."

The report in part is as follows:

"The food law of this state prohibits the sale of poisonous or harmful foods and requires honest labeling as to constituents. It is set forth in the report that of the 686 cases made for violation of the pure food law, but one was found which contained harmful or poisonous ingredients; that this was a candy case; that nearly all the cases were for fraud, misrepresentation or failure to properly label. Three thousand three hundred and twenty-two samples of different foods sold upon the market were collected and examined during the year; 1,131 were referred to the chemist for analysis and 686 were found to be in violation of the law and referred for prosecution. The kinds of food most often found adulterated or misbranded were meat mixtures, lard substitutes, extract flavorings and olive oil.

"It is recommended that the pure food law be amended so as to make it illegal to misrepresent the quality or grade of any food product, as it is now illegal to misrepresent constituents. This would serve to check the sale of stale products as fresh and would prevent the designation of milk as sanitary when it has not been produced in a manner to keep it clean and wholesome."

The Law and the Food Manufacturer

VINEGAR ADULTERATION IN PENNSYLVANIA.

An interesting case in which the adulteration of cider vinegar came under discussion was heard before Judge Josiah Cohen in Pittsburgh January 31st. Niedlander & Bischoff were charged with having sold adulterated cider vinegar in violation of the following section of the Pennsylvania food law of June 18, 1897, as amended May 21, 1901:

"That from and after the passage of this Act no person, firm or corporate body shall manufacture for sale or expose for sale, sell or deliver any vinegar not in compliance with the provisions of this Act. No vinegar shall be sold or exposed for sale as apple or cider vinegar which is not the legitimate product of pure apple juice or vinegar not made exclusively of said apple cider or vinegar in which foreign substances, drugs or acids shall have been introduced, as may appear upon proper test; no vinegar shall be branded fruit vinegar unless the same is made wholly from grapes, apples or other fruits."

In the testimony it was brought out that the vinegar upon which the prosecution was made had been manufactured by the H. J. Heinz Company.

The chemists who testified to having analyzed the Niedlander & Bischoff sample said they did so in the manufacturer's laboratory in conjunction with its own chemist. This in itself is significant of the fairness with which the investigation was carried on.

Those who made the analysis were Prof. F. T. Aschman, of the State Food Commission; M. C. Albrech, Chief of the United States Food and Drug Inspection Laboratory, Department of Agriculture, Pittsburgh, and James A. Evans, of Erie, Pa. These chemists testified to finding the adulteration of the vinegar by the addition of "apple jelly" and water. They stated that their analyses indicated not less than 20 per cent of the final volume of the vinegar sold in Pittsburgh was "added" water, in violation of the act.

The following chemists who heard the testimony said that if the testimony offered by the other chemists was correct there was no question but that the vinegar was adulterated to the extent claimed by the state food chemists: W. P. Bender, of Bloomfield, N. J., chemist in the food laboratory of the United States Bureau of Chemistry of New York; Edward H. Goodnow, Chemist, Bureau of Chemistry, Department of Agriculture, under Dr. Wiley; Prof. William Frear, of the Chemistry Department, State College; Prof. C. B. Cochran, Chemist of the Dairy and Food Department since 1895.

It remained, however, for C. F. Mason, chemist of the H. J. Heinz Company, to make the most damaging admissions. His testimony differed from the chemists of the Food Commission in that he estimated the amount of "added" water to be about 32 per cent of the final volume of the vinegar instead of only 20 per cent as the other chemists had held.

When questioned on the results of the analyses of all the chemists he admitted: "Regarding the results of the analyses, there had been, judging from my own knowledge of pure cider vinegar, without anything added to it at all that there had been added to it a substance high in reducing sugar."

In answer to another question he said, "All of our cider vinegar is manufactured just alike. We have an average acidity of about 6.2 per cent."

Q—"You add water, do you?"

A—"That was reduced, generally speaking now, without individual cases, to 4 per cent."

Q—"That would be a reduction of about 1½ would it?"

A—"Yes, sir."

Q—"Now in order to dilute cider vinegar that shows 6.2 per cent acetic acid down to 4.7 per cent, how much water must you add?"

A—"That would be about 32 parts to 100."

Q—"Nearly one-third?"

A—"Yes, sir."

Q—"That means that you would add a barrel of water to three barrels of cider, a little over three barrels of cider?"

A—"To three barrels, yes."

Q—"So that you would gain a barrel in every three, nearly?"

A—"Yes, sir."

Q—"Would you say these samples were about the average?"

A—"Yes, sir, they represent about the average."

Q—"Then it is true, is it, that the conclusion of these experts we have called, compared very closely to what you know to be a fact?"

A—"Yes, sir."

Q—"And that when they said at least 20 per cent was added, it was a conservative statement?"

A—"That was conservative, yes."

Q—"What other substances were added or are usually added by Heinz, besides water?"

A—"In the manufacture of the cider vinegar?"

Q—"Before it is put on the market?"

A—"There is concentrated sweet cider, known as cider jelly, added, to bring up the solids, which are naturally deficient to meet the requirements of the law."

Q—"Of Pennsylvania?"

A—"No, of New York state in particular, where most of our vinegar is made, and also in most every other state of the Union."

Q—"There is no such requirement in Pennsylvania, that you know of?"

A—"No, I don't believe there is a standard for solids in Pennsylvania. No standard set by law."

Q—"This cider was sold in Pennsylvania, in this county?"

A—"I don't know. I suppose it was."

Judge Cohen: Q—"It was made in New York State?"

A—"Yes, sir. I know it was made in New York."

By Mr. Langfitt: Q—"Don't Heinz make cider in this state?"

A—"They do not press any cider in this state, no, sir. We sometimes generate cider vinegar from cider stock made in other states and shipped in here in tank cars. We generate it into vinegar, on our generators here and market here. Most of our cider is made at outside points, where the apples grow the best."

Q—"Then do you wish to be understood as saying that the cider jelly in this vinegar was put in to comply with the requirements of the New York statute?"

A—"It was put in in New York State. It is illegal to manufacture vinegar in New York State containing less than 2 per cent solids."

Q—"Is there anything in the New York law that requires you to add cider jelly?"

A—"The law itself requires it. You cannot make cider vinegar with 2 per cent solids in it."

Q—"There is nothing in the law that says what you shall add to your cider?"

A—"Oh, no, sir."

Q—"There is nothing in the law that says you shall add water to your cider in New York State or in Pennsylvania?"

A—"The law does not require it, no, sir."

Q—"But you simply say that the cider that you make as the pure product—or the vinegar you make as the pure product of apple cider, you sometimes cannot sell in New York State until you put something into it?"

A—"Yes, sir."

Q—"The water for the reduction of this vinegar to a potable strength was added here at Pittsburgh?"

A—"Yes, sir."

Q—"But the apple jelly was added in New York to bring it up to the 2 per cent before the water was added?"

A—"Yes, sir."

Before the introduction of testimony by the defense Judge Cohen remarked: "Confine your examination to the development of the elements that go to make up the apple jelly as compared with the elements of the apple itself, how they differ, if at all. I will construe the water part of it in my own mind. I have done it already, but I would like to have a little information on that other subject."

The first witness for the defense was Sebastian Mueller, superintendent of the manufacturing department of the H. J. Heinz Company, and an employee of the company for twenty-seven years. He proved a most unwilling witness on cross-examination. His testimony in part was as follows:

Q—"This particular vinegar, was it reduced in New York State or reduced in Pittsburgh?"

A—"You mean the water?"

Q—"Was it reduced to the 4.7 per cent here?"

A—"That was done here in Pittsburgh."

Q—"Then you brought it down to Pittsburgh in its natural strength?"

A—"Yes, sir."

Q—"So as to make it lawful New York vinegar?"

A—"Yes, sir."

Q—"How was this reduced in Pittsburgh?"

A—"You mean how we reduced it with water?"

Q—"Yes, sir."

A—"We simply use filtered water. * * * We pump a sufficient quantity of the cider vinegar into a filling tank, and add enough water to bring the acidity down to 4.7 per cent."

Q—"You say you make some vinegars that show a low percentage of acetic acid, and some that show high?"

A—"A slight difference."

Q—"And when it is high, up to 6 per cent, you water it so as to bring it down to 4.7 per cent?"

A—"We reduce it, yes."

Q—"Why shouldn't you, in such a case, instead of adding water, mix your strong and weak vinegar together, those that are high in acetic acid, and those that are low?"

A—"We have so very little weak vinegar, that there would not be very much to go around, and some years we haven't any."

Q—"As a matter of economy, isn't it more economical to add water than to mix the vinegar?"

A—"That would not make any difference. If you have the vinegar it would be as cheap and easy to mix the weak with the strong."

Q—"What is the price of your vinegar, wholesale, roughly?"

A—"Between 20 and 22 cents a gallon."

Q—"This apple jelly, like the sample on the desk here is not vinegar?"

A—"No, sir."

Q—"It does not taste like vinegar?"

A—"It does not."

Q—"And it does not look like vinegar?"

A—"No, sir."

Q—"And at that time it is added your vinegar has been made?"

A—"The vinegar has been converted, yes."

Q—"So that you take this, apple jelly, and you add it to vinegar that is already complete?"

A—"Because we have to."

Q—"So that you are adding something that is not vinegar, to vinegar after you have made vinegar."

A—"Sure."

Q—"So when you add the water you are adding it to vinegar that is already in existence and made?"

A—"Yes, sir."

Q—"And it would be vinegar without the water, if you did not add the water?"

A—"Sure."

Q—"And water, when you add it, is not vinegar?"

A—"Water is not vinegar, no, sir."

On further examination Mueller testified that in this last year the Heinz Company made about 2,250,000 gallons of vinegar in Pittsburgh, and of this quantity about 600,000 gallons was water, added after the New York vinegar reached Pittsburgh.

The Pittsburgh papers in commenting on the case refer pointedly to the fact that H. J. Heinz, head of the company manufacturing the adulterated vinegar, is President of the State Sunday School Association and prominent in the East Liberty Presbyterian Church and the Men and Religion Forward Movement. One of them adds: "At twenty-two cents a gallon for Allegheny river water, even if it is filtered, the Heinz Company must have added almost \$100,000 additional revenue to the proceeds from the sale of their vinegar more than it would seem to a man up a tree that they are entitled to get from their vinegar. We know Allegheny river water costs money, but it takes some great manipulations of chemistry, Sunday School Associations and courts to convert it into vinegar at the rate of twenty-two cents a gallon."

THE LABELING OF "SALAD OIL."

The case described in the following decision in Von Bremen, MacMonnies & Company vs. the United States, on appeal to the United States Circuit Court of Appeals for the Second Circuit, does not clarify the atmosphere as to the question of who has the best right to the use of the name "salad oil," but it is enlightening as to the admissibility of

evidence along that line. The history of the case is stated fully in the decision, which is as follows:

OPINION OF JUDGE WARD.

This is an information under the food and drugs act of June 30, 1906, against the defendants, who compose the firm of Von Bremen, MacMonnies & Company, containing two counts. The first count charges them with delivering for shipment from New York to Galveston a can bearing the label "Imported Salad Oil Morel Brand," which was misbranded because it was false and misleading in that it indicated that the contents of the can was olive oil, whereas it was sesame oil. The second count charges that the same can was misbranded in that it was labeled or branded so as to deceive and mislead the purchaser into believing that it contained olive oil, whereas it contained sesame oil.

The first count falls within the first subdivision of Section 8 of the act as to foods, viz.: that the article "was offered for sale under the distinctive name of another article," namely, olive oil. The second count falls within the second subdivision, viz.: that the article was "labeled or branded so as to deceive and mislead the purchaser," namely by making him think he was getting olive oil, whereas he was getting sesame oil.

The trial judge, taking judicial notice that standard lexicographers define the words "salad oil" as "olive oil," denied the defendants' motion to quash the information on the ground that it alleged no offense and afterwards, it being stipulated that the can contained sesame oil and not olive oil, he denied the defendants' motion to direct a verdict in their favor. These rulings were within our decision in the Brina case, 179 F. R., 373. The Government thereupon rested and the defendants showed by a large number of witnesses that for some forty years a perfectly healthy oil for edible purposes had been made from cotton seed and sold in enormous quantities in this country as "salad oil" and that other edible oils were made from the seed of sesame, a kind of grass, and from peanuts and from corn, and sold as salad oil. The oil in question is sesame oil imported by the defendants. The defendants also showed that olive oil is always, except perhaps in the case of one brand, labeled and sold as olive oil; that it is four times as expensive as the oils sold as salad oils and that these other oils are sold in vastly greater quantities the American Cotton Seed Oil Company selling from 175,000 to 200,000 barrels and the Union Cotton Seed Oil Company 10,000 barrels a year of salad oil made from cotton seed.

In reply to this the Government called two purchasers of oil, Edward Nougaret, steward of the Cafe Martin (in this country a month), who testified that nothing but olive oil was used there. Francis J. Englefield, purchasing agent of the Hotel Knickerbocker, testified that nothing but olive oil is used there and that "salad" means the very best kind of olive oil. It also called three sellers of olive oil. John W. Eginton, an employe of James P. Smith & Company, who sell nothing but olive oil, testified that in his opinion "salad oil" means "olive oil"; Benito Maspero, an importer of Italian olive oil, who said that in his line of business "salad oil" is generally claimed to be olive oil; Henry L. Marks, chief clerk of an importer of olive oil, who testified that in the trade they supply "salad oil" means olive oil. They all said their oil was labeled olive oil.

The act does not make the intention of the defendants material, but as the case was a criminal one, the jury was bound to be convinced beyond a reasonable doubt that the article in question was misbranded before they could find the defendants guilty. We think the proof did not justify such a conclusion and that the defendants' motion for the direction of a verdict in their favor should have been granted.

Assuming, however, that there was enough to send the case to the jury, other errors were committed. We think that it was error upon the state of facts set forth above to refuse to let the dealers in salad oil not made of olives say whether they had ever heard any complaints from purchasers to the effect that they had been misled or deceived. Such testimony would have been directly relevant to the charge in the second count that the article was branded so as to deceive or mislead purchasers.

It was also error to refuse to let large dealers in this salad oil say what the understanding of the trade was as to the meaning of the words "salad oil." It would certainly be relevant to the inquiry under the first count that the article was branded under the distinctive name of olive oil to show what the trade which buys and sells thousands of barrels of this "salad oil" a year understands by these words and it was also relevant to the inquiry under the second count be-

cause it is a fair inference that the trade does not sell salad oil to the customer as anything else than what it really is.

So we think it was error to permit the Government to cross-examine the defendants' witnesses as to whether they thought the words "salad oil" would be less misleading if the words "pressed from cotton seed" on some of the labels were in larger type or if the cans had been labeled simply cotton seed oil. The question to be decided was whether purchasers supposed they were getting olive oil when they purchased "salad oil" and it throws no light upon this to inquire whether they could have been in any doubt if the words cotton seed oil alone were used or if the words cotton seed oil were printed in large type on the label. We think the case was tried throughout a little too strictly against the defendants.

The judgment is reversed.

HEARINGS BEFORE THE BUREAU OF CHEMISTRY.

A decision covering the requirements of the clause in Section 4 of the Federal food and drugs act of June 30, 1906, providing for hearings preliminary to prosecutions before the Bureau of Chemistry, was handed down in the October, 1911, term of the United States Supreme Court. It was held that the clause only covers preliminary hearings under certain conditions and that procedure under the food and drugs act is not impaired in all cases where hearings are not given. The case was brought against John Morgan and Alfred Y. Morgan in the United States Circuit Court for the Southern District of New York.

The defendants maintained an establishment in New York where, after filtering Croton water drawn from the city pipes, adding mineral salts and charging it with carbonic acid, the water was bottled and sold as "Imperial Spring Water." In October, 1908, a food and drug inspector applied to a druggist in Newark, New Jersey, for several bottles of this water. The druggists, not having them in stock, ordered them from the defendants, who shipped them from New York to the druggists in Newark. He delivered them to the inspector, who paid therefor.

The judge in his opinion, treats the prosecution as having been instituted by the inspector, though this does not affirmatively appear in the record, and the defendants were not indicted until April, 1910, when they were found guilty of shipping misbranded goods in interstate commerce. They moved an arrest of judgment on the ground that it was not alleged that they had been given notice and a preliminary hearing by the Department of Agriculture, contending this was a condition precedent to the return of a valid indictment. The judge held that such hearing must be granted in all cases where the prosecution was instituted by the Department of Agriculture or its agent (181 Fed. 587), and from a later order sustaining the motion in arrest the Government brought the case before the Supreme Court under the criminal appeals act.

The decision of the Supreme Court follows:

OPINION BY JUSTICE LAMAR.

The Federal courts have not agreed as to the effect of the provision for notice and hearing found in section 4 of the food and drugs act of June 30, 1906 (34 Sta. L. 678). (United States *vs.* Barrels Olives, 179 Fed. 984; United States *vs.* Cases of Grape Juice, 189 Fed. 331.) Whether it confers a right upon the defendant, or results in imposing a duty upon the district attorney, can be determined by a brief examination of a few of the provisions of the act.

Under the pure food law not only a manufacturer, but any dealer, shipping adulterated or misbranded goods in interstate commerce is guilty of a misdemeanor. In aid of enforcement of the statute it is made the duty of the Department of Agriculture to collect specimens of such articles so shipped, and the Bureau of Chemistry is required to analyze them. But, even if the specimen, on analysis, is found to be adulterated, there is no requirement that the case be turned over at once to the district attorney, for the reason that the "party from whom the sample was obtained" might be a dealer holding a guaranty from his vendor that the articles were not adulterated. In such case the dealer is not liable to prosecution, but the guarantor (Section 9) is made "amenable to the prosecutions, fines and penalties."

The act, therefore, declares (Section 4) that when, on such examination by the Board of Chemistry, the article is found to be adulterated, "notice shall be given to the party from whom the sample was obtained. Any party so notified shall be given an opportunity to be heard." If it then appears that he has violated the statute, the Secretary of Agriculture is required to certify that fact, together with a copy of the analysis, to the proper district attorney, who (Section

5), without delay, must "institute appropriate proceedings," by indictment, or libel condemnation, or both, as the facts may warrant.

But the act also contemplates (Section 5), that complaints may be made to the district attorney by state health officials. In that class of cases, no doubt because the state agents investigate without giving a hearing, the district attorney is not obliged to prosecute unless such state officers "shall present satisfactory evidence of such violation." But the very fact that he must do so in that event recognizes that he may begin proceedings against a defendant who has not been given a notice and an opportunity to be heard.

In providing for notice in one case, and permitting prosecutions without it in another, the statute clearly shows that there was no intent to make notice jurisdictional. This view is strengthened by the fact that it contains no reference to giving notice to anyone except "to the party from whom the sample was obtained." And if, on the hearing giving him, it appears that he is a dealer holding a guaranty, the act in providing for proceedings against such guarantor contains no suggestion that a new notice shall be given him before an indictment can be submitted to the grand jury.

In cases like the present, or where foreign goods are labeled as of domestic manufacture and vice versa, no scientific examination may be necessary. But usually a chemical analysis will be required to determine whether an article is adulterated. The Bureau of Chemistry is equipped to do that work, so that in practice most prosecutions will be based on reports made by the Department of Agriculture after notice. But the hearing is not judicial. There is no provision for compelling the presence of the party from whom the sample was received; if he voluntarily attends he is not in jeopardy; an adverse finding is not binding against him; and a decision in his favor is not an acquittal which prevents a subsequent hearing before the department or a trial in court.

The provision as to the hearing is administrative, creating a condition where the district attorney is compelled to prosecute without delay. When he receives the Secretary's report, he is not to make another and independent examination, but is bound to accept the finding of the department that the goods are adulterated or misbranded, and that the party from whom they had been obtained held no guaranty. But the fact that the statute compels him to act in one case, does not deprive him of the power voluntarily to proceed in that and every other case under his general powers. If, for any reason, the executive department failed to report violations of this law its neglect would leave untouched the duty of the district attorney to prosecute "all delinquents for crimes and offenses cognizable under the authority of the United States." (Rev. Stats., Sections 771, 1022.) So, an improper finding by the department would no more stay the grand jury than an order of discharge by a committing magistrate after an ordinary preliminary trial. For the statute contains no expression indicating an intention to withdraw offenses under this act from the general powers of the grand jury, who are diligently to inquire and true presentment make of all matters called to their attention by the court, or that may come to their knowledge during the then present service.

Repeals by implication are not favored, and there is certainly no presumption that a law passed in the interest of the public health was to hamper district attorneys, curtail the powers of grand juries or make them, with evidence in hand, halt in their investigation and await the action of the department. To graft such an exception upon the criminal law would require a clear and unambiguous expression of the legislative will.

It was argued that the privilege of a preliminary hearing was granted so as to prevent malicious prosecutions. But, had such been its intention, the statute would have required that a hearing should be given to all persons charged with a violation of the act, and not merely to those from whom the sample was received. A further answer is, that as to this and every other offense the Fourth Amendment to the Constitution furnishes the citizen the nearest practicable safeguard against malicious accusations. He cannot be tried on an information unless it is supported by the oath of some one having knowledge of facts showing the existence of probable cause. Nor can an indictment be found until after the examination of witnesses, under oath, by grand jurors—the chosen instruments of the law to protect the citizen against unfounded prosecutions, whether they be instituted by the Government or prompted by private malice. There is nothing in the nature of the offense under the pure food law, or in the language of the statute, which indicates that Congress intended to grant violators of this act a conditional immunity from prosecution, or to confer upon them a privilege not given every other person charged with a crime.

The judgment is reversed.

Survey of the Food and Drug World

Milling and Baking in Spain.

In Spain many of the bakeries are operated in connection with mills or the mills are conducted as adjuncts to the baking establishments. It is probable that milling and baking are more intimately associated in Spain than in any other country. Two millers who inspected an old mill of cement construction that looked as though it might have been standing since the time of the Moors, were amazed with what they saw. Along one side of a large room were hundreds of brown bags, each containing two hundred pounds of grain. At the far end were stalls for donkeys, which are the most common means of transportation in Spain. The remainder of the room was taken up with piles of panniers used for carrying bread and grain upon the donkeys, and great stacks of bread baskets. The river Darro, flowing beneath the mill, furnished all the water power necessary to operate a large wheel. There was a large sifter which looked like an English or American machine, but the visitors were assured that it was made in Spain. It is becoming a common practice to import such machines in Spain and for the importer to put his own mark upon them, thereby passing as Spanish-made goods, and selling more readily than the real article. All the flour is sifted three times before being used. The best Spanish flour is sifted through haircloth. The flour, however, appeared coarser than the best grade of American flour and inclined to yellowness. Most of the kneading is done by muscular men. Water is used as sparingly as possible in mixing the dough. The amount of yeast is calculated to a nicety. When it comes time to knead about twenty men are lined along a table and the lump of dough passed along. The dough has the plasticity of soft putty. Each man in turn wrestles with the lump, pounding it fiercely, and adding a little dry flour to the outside. By the time the lump has gone the rounds its exterior is of leatherlike consistency.

Mincemeat Manufacturers Organize.

A permanent national organization of mincemeat manufacturers throughout the United States was formed yesterday at the Hotel Astor. The executive committee appointed at a special meeting held in this city last December to perfect the organization, reported that practically 90 per cent of the mincemeat makers had enrolled as members of the new association. The name adopted was the Mincemeat Manufacturers' Association of America, and the following officers were elected:

President, Craig Atmore, Atmore & Sons, Philadelphia, Pa.; vice-president, H. H. Logan, Logan-Johnson Company, Boston, Mass.; secretary-treasurer, W. B. Cherry, Merrill-Soule Company, Syracuse, N. Y. In addition to the officers the executive committee of the association will consist of J. E. Brick, Edgar Brick Company, Crosswicks, N. J., and W. B. Gair, Merrill-Soule Company. W. J. Carlin is counsel for the association.

The objects of the organization are to promote the interests of the mincemeat makers and to secure adequate protection against unjust legislation and drastic pure food decisions. The following concerns have enrolled as members:

Logan-Johnson Company, Boston, Mass.; Gordon & Dilworth, New York; Wood & Sellick, New York; Richard B. Beamont, New York; Atmore & Sons, Philadelphia, Pa.; Whipple Co-operative Company, Natick, Mass.; H. C. Gutches, Port Byron, N. Y.; J. E. Brick, Crosswicks, N. J.; American Preserving Company, Philadelphia, Pa.; Ervin A. Rice Company, Chicago, Ill.; W. H. Marvin, Urbana, O.; Merrill-Soule Company, Syracuse, N. Y.; Hirsch Brothers & Company, Louisville, Ky.; Joseph Middleby Company, Inc., Boston, Mass.; Goodwin Preserving Company, Louisville, Ky., and Armour & Company, Chicago, Ill.

Increase in Garden Truck Industry.

The Bermuda onion industry, which last year amounted to over one thousand carloads, has been developed in the United States in the last few years.

The large celery industries of southern and central California was developed during the past decade. There has also grown up in connection with the celery industry a large cauliflower industry which places a product in the eastern markets at a season when they are not supplied by the Long Island and up-state sections of New York. There has been at least

50 per cent increase in the area devoted to the production of celery in Florida during the last decade and similar extensions of the potato, tomato and strawberry interests of this state.

There has been a very large increase in the acreage of truck crops in the vicinity of Norfolk and Portsmouth. The area devoted to spinach and kale has been greatly increased as well as that devoted to the standard truck crops such as potatoes and cabbage. The successful development of truck interests on the eastern shore of Virginia was developed in the last few years.

Canadian Oyster Industry Dying Out.

According to the report of the assistant secretary of the Canadian Commission of Conservation the oyster industry of Canada is fast dying out. Not since 1901, the report states, has the yield risen above 40,000 barrels and the lowest point in thirty years was reached in 1907, when only 37,000 barrels were harvested. Prince Edward Island was formerly the largest producer, but its output has fallen from 57,042 barrels in 1882 to 9,672 barrels in 1907, and is still decreasing.

The industry is falling away in spite of the fact that the demand is increasing every year. Improved railway facilities have extended the margin of the oyster market far inland. Prices during the past twenty years have increased by fully 240 per cent and it has been necessary to import large quantities from the United States. In 1909-10 Canadians consumed about 389,500 gallons, raw and canned, of foreign grown oysters, and this large quantity was imported in spite of the existence of a duty ranging from 25 per cent ad valorem on oysters in the shell to 2 cents a pint on canned oysters. The total value of oysters imported in 1909-10 was \$369,166 and the duty paid on them was \$43,669.

Agricultural Experiment Stations for Uruguay.

That Uruguay is bent upon developing its magnificent agricultural resources on modern lines is shown by decrees establishing six agricultural experiment stations and setting aside 2,500 acres of land for their use, and appropriating about a million dollars to inaugurate their work. It is provided that the directors shall be secured from the United States and be men experienced in experiment station work. The salary offered is about \$2,500 a year. A poultry station is provided for as a separate undertaking, and its director is to come from the United States. Poultry is to be raised for sale to farmers at a low price after best breeds have been determined, and courses in use of incubators, etc., started and a co-operative commercial center for exportation of live and refrigerated poultry maintained. Large quantities of stock, apparatus and implements from the United States will be required for these new experiment station, and makers of these should investigate the opportunity for business.

North Dakota Will Bar Bad Cream.

"Decomposed and filthy" cream will receive the attention of the North Dakota Food Department during the year of 1912, according to statements of Commissioner E. F. Ladd, made through special bulletin of the department.

"We often come across cream, especially during the summer months," says Prof. Ladd, "which is being shipped in a condition unfit for use and which would be classed as decomposed and filthy both under the state and national laws. Such cream is gathered from shipping stations to be shipped out of the state, and parties so doing are laying themselves liable to prosecution under the national food law, and, at the same time, are making a shipment in direct violation of the food law of the state."

May Use Force in Search for Moonshine Oleo.

Government revenue officers have authority to break in doors with search warrants to enforce the law regulating the sale and manufacture of oleomargarine, according to a decision handed down by the United States Supreme Court. The court held that revenue officers must use extreme measures in enforcing the "oleo" law, the same as are authorized in searching for "moonshine" liquor and other contraband.

The decision was made in the appeal of the Government from a decision of the Federal Court in Kentucky quashing an indictment against B. H. and F. D. Barnes of Louisville, who stopped officers from entering their creamery at the

point of revolvers. The lower court held the Barnes brothers had committed no offense, although the revenue men had a search warrant looking for oleomargarine upon which taxes had not been paid.

Large Seizure of Narcotics in San Francisco.

Secretary L. Zek, of the California State Board of Pharmacy, writes to *Merck's Report* that Clayton F. Richards, regarded by the board as the largest dealer in illicit narcotics, has been trapped into admissions that he had infringed upon the laws regulating the holding and sale of morphine and cocaine. Approximately 1,100 ounces of cocaine and morphine, representing a value of over \$8,000, were seized by the officials on December 5th.

A number of other similar dealers in narcotics were also caught and sentenced. Secretary Zek regards the seizure as the largest ever made in California or in the United States, and as a big victory for the State Board of Pharmacy and for its attorney, Thomas M. O'Connor.

How to Live on \$5 per Week.

Domestic economy is now being taught in the English public schools, and, as a result of a recent decision of the South Shields Education Committee, the teachers, under that authority are now engaged in instructing scholars how a man, wife and two children can best live on an income of 21 shillings (\$5.11) per week.

The London County Council also teaches domestic economy, but in the syllabus of instruction issued by that body the lowest budget is 28 shillings (\$6.81). The *Yorkshire Observer* states that as, according to a labor member of Parliament, there are about 100,000 railway employes, many of them in Yorkshire working for less than 20 shillings (\$4.87) per week, it is well that the daughters of workingmen should be taught how to "make ends meet" on the sums many of them are likely to be called upon to handle as wives and mothers.

American Hen Can Lay Most Eggs.

The American hen is proclaimed champion of the world in a bulletin issued from the Connecticut Agricultural Station at Storrs. The bulletin gives the result of the international egg laying contest, in which several hundred picked hens of all breeds and nationalities were the contestants.

English Wyandottes and Canadian Leghorns scored heavily in the early day of the contest, but after the beginning of the second month the American entrants forged to the front and the results as now footed up show that the American laid on the average four eggs each more than the foreigners.

Wheat on the Other Side of the Earth.

A cablegram from the International Institute of Agriculture, Rome, Italy, dated January 29, 1912, received by the United States Department of Agriculture, gives the following information:

"The estimated production of wheat in Argentina this season is 91,374,000 cwt. (equivalent to 170,565,000 bushels of 60 pounds each); in New Zealand, 3,475,000 cwt. (or 6,487,000 bushels of 60 pounds each). The estimated production of wheat in the Southern Hemisphere this season is 105.5 per cent of the production of last season, or 156,000,000 cwt., (equivalent to 291,200,000 bushels of 60 pounds each). The estimated production of oats in Argentina is 17,381,000 cwt., (or 60,833,000 bushels of 32 pounds each); in New Zealand, 5,342,000 cwt., (or 18,697,000 bushels of 32 pounds each)."

Camel Flesh Not Appreciated in Paris.

Found intractable by the trainer who brought them over from Northern Africa, three camels have been slaughtered in Paris and sold for human food. They sold for more than \$200 apiece, and some restaurants bought joints at a slightly higher price than prime beef, for a novelty line in their bills of fare. Customers, however, did not run the demand to a boom, and a heavy loss resulted to the enterprising chefs. The flesh was not especially palatable, even to those seekers after new sensations, for it had a rather stringy grain to it, and was not appreciated. There will be no steady supply of camel meat to the Paris market as a result of this experiment.

The Samh Bread of the Arabs.

The samh is a small plant that grows on the desert plateau east of Maan. Nothing else is grown there as the rainfall is too small for grain to be cultivated. The plants grow close together, with short stems like lentils. These plants are gathered all summer long by the Bedouins and the seed pods flailed out with sticks and straps. The women take these

seed pods to the wells, where they dig small pits in the ground and fill them with water. They then throw in the seed pods and stir them with sticks and by walking about in the pit. The pods of the samh are not affected by heat, but the water opens them and the seeds fall to the bottom, the hulls floating. The seeds are then dried and sifted, and later ground up in small stone mills. The bread from the samh is very black and gritty, the latter being accounted for by the process of hulling in the sandy clay pits. To make the flour more palatable the Bedouins mix a little sugar with it, or a kind of molasses made from juniper seeds.

Ireland is Where the Potatoes Come From.

The potato crop in Ireland for 1911 is estimated at 3,694,856 long tons, or 137,941,290 bushels, an increase of 30,730,336 bushels over the previous year. The acreage of the crop was 591,259, as against 592,985 in 1910. The largest results were obtained in the north and west of Ireland, where the ordinary yield was about 280 bushels to the acre. The average for the whole of Ireland for the 10-year period 1901 to 1910 was 174.46 bushels, so that the yield for 1911 was more than 30 per cent above the normal crop.

Use of Wood Alcohol Restricted in New York.

The New York board of health has added to the city's sanitary code a regulation prohibiting the sale or use of wood alcohol in any food or drink or in any preparation or mixture intended for internal or external use by man. This includes its use by barbers and others in hair tonics, face lotions and other external applications. Such use, the board says, has been repeatedly shown to have caused sickness, partial or total blindness and even death.

Prof. Beal Resigns From Pittsburgh College of Pharmacy.

The increased demand on his time made by new duties as general secretary of the American Pharmaceutical Association and editor of its official organ, has made it necessary for Prof. J. H. Beal to resign his chair of theory and practice of pharmacy at the Pittsburgh College of Pharmacy. He will, however, continue to lecture at the college on pharmaceutical jurisprudence. Prof. Beal's place on the faculty will be taken by Louis Saalbach, who has been a member of the teaching force at the college for several years.

Increased Vanilla Crop in Guadeloupe.

Consul Frederick T. F. Dumont, of Guadeloupe, French West Indies, reports that this season's vanilla crop there matured 15 days later than in 1910, but is of excellent quality and much greater in quantity, the increase being estimated at 15 to 30 per cent. Owing to the increased acreage and yield, some trouble has been experienced in getting sufficient labor to harvest the crops. From two-thirds to three-fourths of the vanilla crop is usually exported to the United States. The average crop for five years previous to 1910 was 34,000 pounds.

Texas Lands Reclaimed for Rice Growing.

A dispatch from Brownsville, Texas, states that scientific investigation on the part of the United States Department of Agriculture is soon to lead to the re-establishment of the rice growing industry in the lower Rio Grande Valley. It will mean the reclamation of many thousands of acres of land that have heretofore been considered unsuited for growing that cereal.

Cottonseed Oil for Army and Navy.

The use of cottonseed oil in place of lard will shortly be adopted by the quartermaster and subsistence departments of both the army and navy of the United States.

A tentative experiment with cottonseed oil was made last year by the navy on two battleships, and so well satisfied was the department with the results accomplished that it has practically been decided to use cottonseed oil throughout the service.

Turkeys are Worth More Than Lead.

The secretion by a New York butcher of one pound of lead sinkers in each of his Thanksgiving turkeys led to his conviction and sentence to three months in the penitentiary on January 25th. The prisoner was Jacob Ginsberger, against whom Albert Lutz, an inspector of the city weights and measures department, appeared as complainant.

Per Capita Consumption of Coffee Increasing.

While the per capita consumption of tea in the United States is about stationary, that of coffee is steadily increasing.

THE OLEO SITUATION IN WASHINGTON.

WASHINGTON, D. C., January 22, 1912.

For months the oleomargarine interests have been working assiduously to discredit and defeat the ten cent tax on imitation butter. Misleading statements have been sent to women's clubs, labor organizations and other societies to create a prejudice against the law, and to induce if possible resolutions against it. Many such resolutions have been adopted and many individual protests against the law have been written, all based on deceptive literature emanating from the oleomargarine people. Erroneous statements have also been made in magazine advertising and in newspaper articles. As a result of all this persistent sophistical agitation considerable opposition to the existing law has been created. Meanwhile there has been an attack on the law from an entirely different source, of entirely different nature, and based on different motives. This opposition criticises the law for not being stringent enough, for not protecting against fraud as it should, for giving opportunity for perpetrating great wrong to both consumers and producer, for failure to accomplish what was intended, for promoting deception. This latter attack on the law is largely based on facts furnished by the internal revenue department, and is therefore entitled to more than ordinary consideration. Some of the points of criticising the present law are given below. In the first place some of the courts have held that many of the administrative provisions of the general internal revenue laws—right of search, etc.—do not apply to the oleomargarine laws. This has materially weakened their enforcement and done much to nullify them. A recent decision of the supreme court removes some of this trouble, but the fact remains that the law has intrinsic weakness in this direction. Secondly, the law has been further emasculated by action of the courts in holding that "essential ingredients," no matter how yellow, are not "artificial" color; therefore much oleomargarine of a high color is made from ingredients which the manufacturers claim to be "essential" or "necessary," but such stuff is "uncolored" oleo and pays only a quarter cent tax. A third fault which the internal revenue department finds with the present law is that the ten cent tax, forty times as much as the tax on uncolored oleo, is so high as to stimulate deception rather than prevent it, just as an excessive tariff stimulates smuggling. Out of 115,000,000 pounds of uncolored oleo which paid a quarter cent tax last year the Commissioner of Internal Revenue estimates that 80,000,000 pounds were stealthily colored and subsequently reappeared on the market as imitation butter, much of it being sold as butter at near-butter prices to the swindling of the consumer as well as the government.

With these two lines of attack upon the present law in mind the Congressional Agricultural Committee appointed a sub-committee to draft a new law. The sub-committee first of all agreed upon this basic principle: that they unanimously favored all reasonable restrictions tending to promote the honest sale of oleomargarine, and any effective checks on dishonest practices; that butter men are entitled to their legitimate market and to be protected in it, and that the same principle should hold as regards oleo; that the weak features of the present law should be strengthened with such additional restrictions as shall cause oleomargarine to be sold for what it is.

The committee seemed to wish to deal fairly by all parties and was influenced much by advice from the Internal Revenue Department. The result is a conservative bill that ignores the extremists on both sides and may displease both. It drops the color line and the ten cent tax on imitation butter, but requires oleo to be sold only in half-pound and pound prints, which are made the manufacturers' original packages and must be sealed by a long, narrow revenue stamp which must remain on the print till it is sold by the retailer. The oleo interest asked for five and ten pound prints but the committee refused the request. The oleo interests asked for a fifth of a cent tax, but the committee multiplied this by five and provided for a cent tax, which is more than double the average tax for the past year and which on last year's production will bring in a little over a million dollars revenue. In several instances penalties for violating the law are increased and more teeth are put into it in matters pertaining to its enforcement. The special taxes on manufacturers and wholesalers are increased above what the oleo people asked for. The name of the commodity is changed to margarin to conform to foreign nomenclature and to get something shorter than the old six syllable word. The committee felt that regulating sales in hotels and restaurants should be left to the states, rather than made a part of a revenue law.

GEORGE M. WHITAKER.

Secretary National Dairy Union.

BOOK REVIEW

Edible Fats and Oils, by W. H. Simmons, B. Sc., F. C. S., and C. Ainsworth Mitchell, B. A., F. I. C.

The names of these authors are both familiar to chemists, and whatever emanates from their pens may be looked upon as having the stamp of authority if not of genius. The work is organized in a peculiarly British manner (Simmons took his degree in the University of London and Mitchell is an Oxonian), but its value is very great. There is very little superfluous matter, in fact the last chapter, relating to statistics of the British trade in edible oils and fats, is the only part that falls under this criticism. Little of the information in the book is new, but practically all the useful information extant on the subject is here collated and set down for instant availability. It goes first into chemical constituents and from that to the commercial preparation of oils and fats, jumping back to chemistry in a series of analytical methods. It is like the conjurer's game of showing the various articles first, then cooking them in a top hat and finally restoring them to their original states, and to read the book is fully as fascinating as watching the conjurer. A chapter on butter is very enlightening in parts as to English methods of adulteration, and the authors refer to the introduction of boric acid as a preservative of butter in that benighted country without turning a hair or making a single exclamation of horror.

(London: Scott, Greenwood & Son; New York: D. Van Nostrand Company; \$3.00 net.)

Principles of Human Nutrition, by Whitman H. Jordan, Director of the New York Agricultural Experiment Station.

This author makes the error pointed out in an article on the cost of living, written by Robert Emmet Wood and printed in the October, 1911, issue of the AMERICAN FOOD JOURNAL of differentiating between "natural" and "chemical" food preservatives in his chapter on the preservation of foods, and he also makes a supreme error in alleging that the most extensive recent study of the effects of "chemical" preservatives in food were made by Dr. H. W. Wiley. The work of the Referee Board of Consulting Scientific Experts is classed as "an investigation" and the board is not even mentioned by name.

If scientists or pseudo-scientists are to ignore the facts established by research, there would seem to be little use for scientific research or the publication of works of an apparent scientific character except to distort or conceal the results of such work. Mr. Jordan has produced a book of much impressiveness of appearance, and published it with the imprint of a most important publishing firm, apparently for no purpose than to adroitly take up the fight for the exploded theories of Dr. Wiley.

(New York: The Macmillan Company; \$1.75 net.)

The Modern Cook, by Charles Elmé Francatelli; edited by C. Herman Senn, G. C. A.

It is sometimes possible to quarrel with those theoretical cooks who prepare fanciful recipes for the household departments appearing in the daily press, but here is a collection of cooking formulae by a master whom it would be a sacrilege to criticize. Francatelli prepared this compilation of recipes three-quarters of a century ago, and the editor has not brought them down to date in any other sense than to organize them and render them more suitable for use by the up-to-date cook. Cooking, like art, is long of life, and what was good in the good old days is good now. The epicure has survived the gourmet, and there is a better place now for real art and science in cookery than at any time since men began to roast the fruits of the primitive chase over fires before devouring them. Cooking preceded knives and forks and table etiquette, and it will outlast our present fashions. Out of eighty general headings in Francatelli's category, a good three-quarters are given to meats, game, fowls and fish. Salads occupy a prominent place, and soups, dressings, sauces, souffles and pastries get all the space they need from the author's standpoint. To read this book is a treat, to follow the recipes and produce those dreams of dishes must be the acme of delight for the culinary artist, amateur or professional. The editor says in his introduction, "Francatelli was a good culinary architect," and that tells the whole tale.

(New York: The Macmillan Company; \$3.00 net.)

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THE WILEY INVESTIGATING COMMITTEE REPORTS.

The report of the Committee on Expenditures in the Department of Agriculture on the Wiley investigation is chiefly remarkable for what it omits. Some of the testimony presented at the hearings and published in full in the printed report, that have a direct bearing upon the facts sought to be brought out by the investigation, was not considered at all by the committee apparently, or at least not brought to the attention of Congress in the report.

More particular reference is made to the testimony of Secretary Wilson in which he introduced the letter of Mr. W. B. Miller of the Department of Justice to show why Dr. Wiley, Chief of the Bureau of Chemistry, could not be used as a witness in the coca-cola case because of his inability to qualify as a physiologist, a chemist, a toxicologist, a physiological chemist, a pharmacologist or a doctor of medicine (page 891) and to the testimony of John Ball Osborne, Chief of the Bureau of Trade Relations of the Department of State, which showed that Dr. Wiley equivocated in his testimony in regard to the agreement with the French government on the introduction to this country of canned peas treated with sulphate of copper (page 910). Both of these matters affect the charges against Dr. Wiley very materially. In the introductory paragraphs of the report it is stated that the scope of the inquiry was purposely enlarged to take in an examination of the whole administration of the Department of Agriculture, and the Wiley charges were treated as but an "incident" of the investigation. It would appear that all of the things brought out as regards Wiley were only "incidental" to a very patent effort to besmirch Secretary Wilson and those of his subordinates who antagonized Wiley. The things that Wiley did were mere "incidents," not to be considered at all—the main issue being to discredit the department if possible, and the whole investigation seems to have been conducted upon lines to confuse the ordinary observer and create the belief that it was not Dr. Wiley who was being investigated, but Secretary Wilson and a few of his more faithful and conscientious subordinates.

The committee has reported—the mountain has been in labor and brought forth a mouse. It is probable that from the standpoint of the Wiley partisans the

report is a bitter disappointment. On practically everything sent out by the press associations during the hearing the report is silent. For instance there is not a word in it concerning the "McCabe forgeries" or the administration of the third degree to a young woman stenographer, whose age as shown by the records in the appointment division is fifty-seven years.

There is a good reason for the lack of words on those points. They were made only in the insinuating questions of the criminal lawyer who represented Dr. Wiley at the hearing. Nor does it appear in the report that Secretary Wilson and the other officials of the department were denied the privilege of having a lawyer, even Solicitor McCabe, cross examine the witnesses put on the stand by the Democrats of the committee, who of course were seeking to besmirch the Republican officials of the Department of Agriculture to make campaign material.

There is much to be said against the old-time party organ newspapers, but had there been any of that kind left in the country, attention would have been drawn to the fact that Wilson, McCabe and Dunlap were denied what is a right in a court of law.

The delay in making the report, it is now generally understood, came from Chairman Moss' determination to have a unanimous production. Why? A reasonable explanation, that is, an explanation made by a reasonable man who knows the facts, is that it is the desire of the interests that are served by Dr. Wiley; that is, the straight whiskey and the "holier than thou" short weight food manufacturers, intend making another big advertising campaign. It will look good in their advertising matter to quote something favorable to Wiley from the "unanimous" report of the Moss committee.

The statement of the committee that the Secretary of Agriculture has misconstrued the pure food law by assuming that his duties are judicial in character, whereas, in the opinion of the committee, they are wholly administrative and ministerial, is in direct conflict with the opinion of the Attorney General, who held:

"It is, of course, apparent that in the administration of a statute of such far reaching effect as the food and drugs act the ordinary investigations and conclusions of the bureau may be disputed by the interested parties, and Section 4 of the act provides for a rehearing by the Secretary of Agriculture whenever the conclusion of the bureau is disputed."

The committee found that it was the duty of the Secretary of Agriculture to decide whether or not the findings of the Bureau of Chemistry are free from error in considering violations under the law (page 7). It is difficult for the secretary to decide whether the findings of the Bureau of Chemistry are free from error on scientific questions unless he has the benefit of scientific advice. This he has had from the Referee Board. This finding of the committee of page 7 of its report is in direct conflict with the finding on page 14 that the Referee Board is not necessary to the secretary in the enforcement of the law, and, therefore, not authorized by the law.

The committee finds that at the time of the taking effect of the law the prompt prosecution of every infraction of the law, whether of major or minor importance, was an impossibility, as such a course would have utterly congested the business of the courts (page 5 of the report). This, in effect, is a finding by the committee that the course of the Secretary of Agriculture and of the solicitor in abating technical violations of the law was correct. In fact, the committee

found that the necessary readjustment of the business of food purveyors required time and that it was good administration to grant reasonable opportunity for such a purpose (page 5 of the report).

The finding of the committee that the Secretary of Agriculture is only to act as a clerk to transmit the findings of the Bureau of Chemistry to the proper district attorney is in conflict with the previous statement of the committee (pages 4 and 5 of the report) that the secretary has had delegated to him by the three secretaries the duty of reviewing the findings of the Bureau of Chemistry.

The committee criticises the Bureau of Chemistry for having prepared too many cases for prosecution. They say, on page 8:

"It does not require comment to sustain a conviction that either too many cases were prepared in the Bureau of Chemistry or too many of these cases were abated in the Board of Food and Drug Inspection."

Subsequently, on page 8, they say:

"Frequently it is possible to adjust the practices of the purveyor to conform to the spirit of the law, and from the record before it your committee is convinced that many such cases appear among the large number of abated cases of which comment has been made."

Dr. Wiley's statement that over a million dollars has been lost to the Government by preparing cases in the Bureau of Chemistry which were afterwards abated by his colleagues in the Food and Drug Inspection Board is not endorsed by the committee. The committee finds:

"Frequently it is possible to adjust the practices of the purveyor to conform to the spirit of the law, and from the record before it your committee is convinced that many such cases appear among the large number of abated cases of which comment has been made. Where this has been the result, it is not generous to say that the money spent in the preparation thereof has been squandered or that the purpose of the law has been defeated."

The committee absolutely repudiates one man control in the Bureau of Chemistry of food and drug cases, and recommends that the Board of Food and Drug Inspection should consist of the Chief of the Bureau of Chemistry and two associates within the Bureau of Chemistry, sitting with *equal power* as board members. The committee also suggests that if the Chief of the Bureau of Chemistry, or either of the other two chemists, are incompetent or over-zealous, they should be removed.

The committee makes no finding against Dr. Dunlap, but simply says that the discord between Dr. Dunlap and Dr. Wiley was due to the fact that their respective duties and spheres of action were not well defined.

The committee makes absolutely no criticism of Solicitor McCabe, but does suggest that he should not review cases where the Bureau of Chemistry has found no misbranding or adulteration. The committee finds that General Order 140 gave the Solicitor too much power and increased the cost of administration. This is the sole criticism in the report regarding the solicitor or his office.

The committee finds that there is authority under the law for the creation and maintenance of the Referee Board of Consulting Scientific Experts to aid the Secretary in the discharge of any duty enjoined on him in his official capacity. The committee raises, but does not answer, the question of the legality of the board on the sole ground that the determination of the general questions submitted by the Secretary to the Referee Board is not enjoined upon him under the law. The raising of this question is squarely at variance with the finding of the committee that the regulations of the three secretaries properly delegate to the

Secretary of Agriculture the duty of reviewing the findings of the Bureau of Chemistry. If the secretary is to review the findings of the Bureau of Chemistry on these scientific facts, he must have the opinion of able scientists to assist him. The committee evidently recognizes this fact, for they say, speaking of the Referee Board:

"They are merely the personal advisers of the Secretary of Agriculture on scientific questions submitted to them for determination."

The committee found that the enforcement of the pure food law is the duty of the Department of Justice and that the Bureau of Chemistry is only an additional agency to secure evidence of violations of the law and present it to the courts for prosecution.

The committee does not recommend the abolition of the Referee Board. The committee says that if such a Board is deemed necessary or advisable in the proper administration of the pure food law, its authority should be expressly conferred, its scope and jurisdiction clearly defined, and the effect of its decisions declared by Congress.

THE MINCEMEAT CONTROVERSY.

Last May Dr. Wiley's Board of Food and Drug Inspection gave notice of a meeting to be held in Washington to consider the question of what were "The Proper and Normal Ingredients of Minced Meat, and All Practical Knowledge Germane to this General Topic." There were present at this meeting representatives of the manufacturers of approximately 90 per cent of all the mincemeat sold in the United States. At the hearing exhaustive evidence was introduced on the subject of mincemeat, and the manufacturers there present filed the following statement:

Honorable Board of Food and Drug Inspection, Department of Agriculture, Washington, D. C.

Gentlemen:

In the matter of defining the normal ingredients of mincemeat, we respectfully request the Board to rule as follows:

1. That mincemeat is a mixture used for food and made essentially from some or all of the following ingredients: Fresh fruits, dried fruits, candied fruits, citrus fruits, salt, starch, flour, water, meat as used for food, suet, vinegar, fruit juices (concentrated or unconcentrated, fermented or unfermented), sugar, syrup, molasses, corn syrup, grain, alcohol, spirituous liquor, spices and with or without a legally permitted chemical preservative.

2. That no prosecution will be brought against any product sold under the name "mincemeat" and made as above if it is wholesome and is plainly labeled on the face of the principal label in type not smaller than eight point brevier caps with the name of each ingredient used in said mincemeat.

3. That a reasonable time be given manufacturers to dispose of labels now on hand not in accord with this ruling and that this ruling go into effect January 1, 1912, and that no prosecutions be brought against goods on the market on account of misbranding until after January 1, 1913.

The uncontradicted evidence showed that mincemeat had been made impartially with or without flesh for the last 300 years, according entirely to individual taste. It was also shown without contradiction that for the last twenty-five years almost every kind of sweetener has been used in making this product, including maple syrup, cane syrup, corn syrup, refiner's syrup, molasses, brown sugar, maple sugar and granulated sugar.

Several months after this hearing the Board of Food and Drug Inspection circulated broadcast what it termed a "Tentative Food Inspection Decision," as follows:

LABELING OF MINCEMEAT.

The study of the literature shows that mincemeat is a product which has been known for a great many years. From early times it has been made from numerous well-known

ingredients, certain of which appear to be fundamental. These fundamental ingredients are lean meat in material amount, or a combination of meat with suet, together with sugar, molasses, spices, apples and other fruits, with or without some alcoholic liquor such as brandy, cider or the like.

These facts were confirmed by the evidence obtained at a public hearing and by the opinions secured from a large number of grocers, bakers, hotel managers and housekeepers, by correspondence and personal interviews.

After due consideration of all evidence the board, while realizing the difficulty of fixing an arbitrary standard or definition for such a product as mincemeat, is of the opinion that the evidence shows conclusively that the standard recommended by the Association of Official Agricultural Chemists and adopted by the Association of State and National Food and Dairy Departments in August, 1908, is a fair and reasonable one and in accordance with the facts, such as will guarantee to the consumer a product of good quality and substantial value. This definition is as follows:

Mince, mincemeat, is a mixture of not less than 10 per cent of cooked, comminuted meat with chopped suet, apple and other fruit, salt and spices, and with sugar, syrup or molasses, and with or without vinegar, fresh, concentrated or fermented fruit juices or spirituous liquors.

The board endorses this standard and is of the opinion that it represents clearly the ordinary conception of mincemeat, and a product under the name of mincemeat differing from this definition would be misleading to the purchaser and therefore misbranded; and the board is further of the opinion that it is a reasonable standard for the manufacturer to attain and that no undue hardship is exacted in requiring that "mincemeat" shall comply with this standard.

The question of the use of glucose and starch in mincemeat has been considered and the board is of the opinion that these are not normally ingredients of mincemeat, and, therefore, their presence should be plainly indicated on the label.

It is to be particularly noted that this "tentative decision," ignoring the record of the hearing, makes an absolute requirement that all mincemeat must contain at least 10 per cent of flesh, and while allowing the use of every other kind of syrup, requires that corn syrup and corn starch alone, of all other ingredients, must be declared on the label when used.

As soon as it was discovered that this "tentative decision" was being sent out broadcast the mincemeat manufacturers held a meeting and requested Dr. Wiley as chairman of the Board of Food and Drug Inspection to withdraw it. This request was ignored and its receipt was not acknowledged. Thereupon they appealed to the three secretaries; namely, of Commerce and Labor, of Agriculture, and of the Treasury, who are charged with the enforcement of the food and drugs act.

A similar appeal was taken by the manufacturers of corn starch and corn syrup.

The mincemeat makers claim that Dr. Wiley's board has no right to say that mincemeat made without flesh cannot be sold; that many classes of people, such as vegetarians, those who desire a "light" product more in the nature of a dessert than a staple food, etc., wish to buy mincemeat that does not contain flesh, and that they have a right to supply this demand.

The right to use corn syrup and corn starch is admitted by Dr. Wiley's board, and no question is raised as to the wholesomeness or purity of these products. The manufacturers, however, claim that discriminating against corn syrup in favor of syrup made from cane or beets, and such by-products as molasses or refiner's syrup, which cost less and are not so pure, by requiring the former but not the latter to be declared on the label along with preservatives and artificial colors which are not foods at all, is unfair; that if declaration on the label is required for one kind of syrup it should be required for all, so that the public may know in every case just what syrup has been used.

Lastly, all these parties claim that the proper course for the department to pursue is not to limit ingenuity in making new kinds of mincemeat, by attempting to define or standardize this product, but to say to those who produce it:

You may use such recipes as you see fit to make mincemeat and may make it with or without meat, as you choose, but in order that the public shall not be deceived you must declare on the label every ingredient which you use and the quantity used.

Such a course it is claimed will prevent any possible deception of the public and will enable it to know exactly what it is buying in every instance. Moreover, the positive provisions of the food and drugs act itself make it illegal for the manufacturers of mincemeat or of any other food product whatsoever to use ingredients injurious to health.

Not only on account of the mincemeat industry itself, but on account of the important principles involved, this decision has created a widespread interest throughout the whole country. Many boards of trade and produce exchanges have protested against the course pursued by the Board of Food and Drug Inspection. Many newspapers and newspaper associations, grocers, grain dealers, and manufacturers of various kinds throughout the country have become interested, and as a result the three secretaries have ordered the Board of Food and Drug Inspection to present the facts in the case, and it is understood will afford the various interested parties an opportunity to be heard. The power to standardize or define foods is such a far-reaching and tremendous one that Congress has repeatedly refused to vest it in an official or group of officials, and such a thing would be entirely contrary to the letter and spirit of the food and drugs act itself, which contemplates that the public itself, represented by a jury of twelve men in court, shall be the judge of whether any person has been guilty of the crime of selling food which is injurious to health or is misbranded.

It would seem that in thus attempting to fix standards and definitions of food products and then bringing prosecutions for violation of these standards and definitions which it has itself set up, the Board of Food and Drug Inspection is attempting to exercise the function not only of prosecutor, but also of judge and jury. An analogous case would be to give a policeman power to say what is and what is not a crime, and to require the courts to be governed by these definitions in determining a person's guilt.

NEBRASKA'S NEW COMMISSIONER.

Niels P. Hansen has been appointed Deputy Food, Drug and Dairy Commissioner of Nebraska by Governor Aldrich, to succeed the late William R. Jackson. Mr. Hansen was born in 1864 in Copenhagen, Denmark, where he received a common school education and graduated in 1882 from "Slagelse Real Skole" in a course of natural science, shortly after which he left for the United States, going to Nebraska, where he spent four years on a farm, afterward taking up the drug business; attended the Chicago College of Pharmacy in 1889-90 and 91; passed the State Board of Pharmacy of the State of Illinois by examination in 1891, also Nebraska State Board of Pharmacy in 1891, after which he engaged in the drug business at Kearney, Nebraska. He was appointed by the Governor of Nebraska as a member of the Nebraska State Board of Pharmacy Examiners for six years. He has conducted a drug business continuously all these years and is still in that business.

A REAL INVESTIGATION OF WILEY.

As investigations seem the order of the day, Congress can perform no greater service for the American people than to investigate the methods and manner in which the pure food law has been and is being enforced. This would be a public service second to none.

Among other things which Congress would discover would be that Wiley's methods of enforcing the law are, more than all other reasons combined, responsible for the increased cost of living; and this, too, without a corresponding benefit to consumers.

There is too much complaint and soreness on the part of the manufacturing interests of the country not to be some just ground of complaint. Wiley is feared by them in a way in which no honest or impartial official should or would be feared. An investigation would reveal conditions which should not be tolerated for an instant under a republican government.

The reputation of a food manufacturer should be like the reputation of Cæsar's wife, and when the cry of "adulteration" is started against him, his business is heavily damaged if not ruined, even though he may be successful in refuting the charges in the courts. Wiley has charge and control of the inspectors; he can launch the charge, through his press bureau, of "dopester" and "adulterator" against any manufacturer, and a contested case means continued publicity with the finger of suspicion pointed at the manufacturer. This means a heavy loss to the manufacturer, no matter how groundless the charges may be. Few businesses can stand it, and that is why hundreds of merchants confess the charge, and get their goods back with the payment of court costs only, or plead guilty and pay a nominal fine, rather than contest. Occasionally a judge with more than usual discernment refuses to fine, but suspends sentence, notwithstanding the plea of *nolle contendere* or the plea of guilty. The cost of defending a charge involving a physiological or therapeutic question runs up into the thousands. It is said that the defense in one important case cost a quarter of a million dollars and Wiley was practically nonsuited; but he had damaged the defendant, even if he did not succeed in proving him guilty, and thus accomplished his purpose, in part at least.

The pure food law (Section 4) contemplates that after Wiley has made his examination of samples and reached the conclusion that the law has been violated, the party charged is entitled to hearing before the Secretary of Agriculture for the purpose of showing some fault or error in Wiley's finding. Thus the power to confirm or reverse the conclusions reached by Wiley is thrown upon the secretary, and of course he is required to reach some conclusion of fact.

One would naturally suppose that if this hearing was not held by the secretary himself, it would be before some unprejudiced and impartial body; but before the Moss investigation, it was before a body of three, two of whom were supposed to be unprejudiced, and one prejudiced; because it was he (Wiley) who brought the case and acts as prosecutor. The accused at least had some chance then, because the jury was only one-third stacked on him; but since the Moss investigation, the jury is two-thirds stacked! What a farce the proceeding becomes; and so well recognized is the farce that hearings are now seldom had. Thus provisions in the law which were intended to safeguard the rights of the accused have been converted into a bludgeon against him. And Wiley is now made chief inspector, chief examiner, instigator of the

charge, prosecutor, jury and judge; and if any manufacturer dares cry out against such an unjust condition he is met with the cry from Wiley and the Wiley press: "He is an adulterator and a dopester who is being pinched by the law." And all this power in the hands of a man who says: "I am the spirit and essence of the pure food law, and without me there would be no law," and who uses the law as his private property for the benefit of his friends and the confusion of his enemies; "for he that is not *with* me is against me." Isn't it time to investigate how this power is being used, in view of the ground rumbling and general spirit of discontent on the part of the manufacturers?

Is it no concern of the nation to know from whom or what interests Wiley has accepted fees or compensation while he was drawing a salary from the government?

Is it no concern of the nation to know how much time he has devoted to earning his salary and how much time he has devoted to private interests?

Is it no concern of the nation to know whether Wiley is in fact a scientist or an expert, or only a charlatan or a humbug dealing out buncombe to the people?

And above all, is it no concern of the nation to know whether he is enforcing the law impartially or partially?

Let the manufacturers know that they will not be in danger of reprisals by Wiley, and see how the facts will come out. Wiley explained the "honey lie" as "a scientific pleasantry"; and a recent seizure of considerable magnitude which wrought considerable damage, as having been made on "academic grounds."

It is time to put a stop to "scientific pleasantries" and "academic" actions, and research chemical work for private interests at government expense, and the way to do this is to have an investigation which will bring out the facts.

The Moss investigation was not a real investigation of anything other than Wiley's connection with the Rusby contract, and while some other features were touched upon, it never did reach the real meat of the situation. It never even started in to do it.

By all means investigate Wiley.

THE IMAGERY OF A STREET NUMBER.

A couple of emigrants from County Carlow arrived at Castle Garden on their way to Gold street, New York. After the inspectors had passed them they proceeded on their way, and one, with fewer illusions than the other, espied a dollar bill in the gutter. He was for seizing it, but his companion restrained him. "Don't be bothering with that stuff," he remonstrated, "wait till we get to Gold street." Gold street, they found, has only putative gold, and that in the pockets of its residents. If they had gone farther, they would have found Wall street without a wall and Battery place without bastions. Broadway is only broad by comparison.

Mr. La Follette is credited with being the influence behind most of the laws that have been passed in Wisconsin in late years. Everything of a progressive nature that is on the statute books of that great state originated with the grand high muck-a-muck of progressiveness. Lately Mr. La Follette has been taking credit to himself for passing the railroad laws of his state and instituting such reforms in the running of trains on schedule time that recently, in Michigan, he was impelled to comment on his success because the

train from Saginaw to Lansing got him in too late to get out of his lungs everything that was in them. Mr. Osborn, governor of Michigan, made some unkind remarks about Mr. La Follette and called attention to a few inconsistencies in his method of running his own state. But the creator of all that is good and great in Wisconsin would hardly be bound by the ordinary rules of consistency and logic—his statesmanship is of a more rugged sort.

Food laws in Wisconsin have felt the ministering touch of Mr. La Follette. At the last session of the legislature of that state an effort was made to do justice to corn syrup, one of the manufacturers of which is the Corn Products Refining Company, with headquarters until recently at 26 Broadway, a number that also housed the Standard Oil Company. So potent is that particular number for mischief, and so capable of invidious meaning when uttered in the right tone of voice, that all Mr. La Follette had to do when some of the bills looking to reform in Wisconsin's food laws were in committee was say: "Pst! Twenty-six Broadway," and forthwith the bills were killed. So the "glucose mixture" law of Wisconsin stands, a monument to progressiveness of the La Follette kind.

Now it happens the Corn Products Refining Company has made a change of base. This does not mean a change of methods, or of morals, or of personnel, but merely that the lares and penates and office records of the company have been moved. Twenty-six Broadway no longer shelters this organization. On January 1st it removed to 17 Battery place. What Mr. La Follette will do now when he wants to put the poison on corn syrup is problematical. Will he endow Battery place with bastions and plant a battery behind them? Can he pave Gold street with gold and make a walled city of Wall street? When the question of a successor to Commissioner Emery was in contemplation some of that gentleman's opponents were witnesses to the magic of Mr. La Follette's spoken word. All he had to do was tell Governor McGovern to reappoint Mr. Emery. No fear but the La Follette imagination will be equal to the task of attaching a sinister and shuddering interest to so simple a formula as "Seventeen Battery Place," as our brave emigrants from County Carlow could endow Gold street with a golden pavement and on the strength of that imagery pass up the dollar bill in the gutter with light hearts.

THE PERENNIAL BREAKFAST FOOD.

We live and learn. Everybody supposed that when it was established that only a dozen or so combinations of grains were the basis of the nearly two hundred brands of breakfast food on the market, we were in possession of the last word on the subject of breakfast foods. Cereal preparations coming under the generic term of breakfast foods have been known to the American public only in recent years. Cracked wheat and oatmeal were the staples for breakfast consumption before that. But here is new information. Cereal compounds, cooked and ground, were known in the fifteenth century. Consul W. W. Kitchen, at Teneriffe, writing to the State Department, gives some interesting information about "gofio," a Canary Island product, that seems to answer the general specifications of our American breakfast foods. He says:

Gofio is a name applied in the Canary Islands to a food obtained by roasting and grinding grain. The word gofio comes from the Guanchos, a Hamitic people numerous in the islands before their subjugation by the Spaniards in the

fifteenth century, and the food is thought to have originated with them.

As different grains are used, there are many varieties of gofio. Maize, wheat, and barley are commonly used, but any edible grain or seed is considered suitable, especially in times of scarcity. Gofio was originally used in a few other countries—for instance, in India—but it is not found in the adjacent Madeira, Azores, or Cape Verde Islands. Lately it has been introduced into Cuba, Porto Rico, and into those parts of South and Central America and the West Indies where former inhabitants of the Canary Islands have made their homes.

The best gofio is made up of 90 per cent maize and 10 per cent wheat, together with some salt, which, however, should not be added until the food is to be eaten. If added sooner, the salt seems to hasten mildew. In Hierro and Gomera, the most westerly islands of the archipelago, barley alone is used in the preparation of gofio. In the island of Teneriffe 75 per cent of the inhabitants subsist entirely on gofio, while probably 90 per cent use it to some extent. In some localities in the country districts the natives have a peculiar way of preparing this staple article of food. After the addition of either milk or water, to obtain a doughy consistency, the mass is put in a "surrón," or the skin of a young kid made into a bag. The bag is then manipulated until the mass becomes as hard as the maker desires. Afterwards it is eaten with cheese, sardines, etc. Others prefer to eat it in the powdered state thrown into coffee, milk, water, soup, etc. Figs, salt fish, and pork form the remainder of a laborer's diet.

Five centuries of vogue does not seem to have impaired the popularity or materially changed the methods of making this primitive breakfast food. In this country we follow the principles established by the sons of Ham, but we add a few frills and fancy labels for purely commercial purposes. Centuries hence our descendants will doubtless still be eating various combinations of cereals, cooked and macerated. If the vegetarians have their way, such products will form a larger part of our national diet than at present. Breakfast foods, like the poor, we have always with us.

THE EXIGENCIES OF PRESS WORK.

Recent dispatches from Washington indicate the desperate straits to which the Wiley press bureau has been put to get the necessary publicity for Dr. Wiley and keep him in a favorable public eye. The particular eye of the public that has been directed toward the "guardian of twenty million stomachs" has shown symptoms of becoming jaundiced and unsympathetic. To turn it into the "moist eye of sympathy," as Opie Read feelingly puts it, it has been necessary to delicately raise the curtains and admit the public to a knowledge of the conjugal blissfulness about to overwhelm the Wiley household. Mrs. Wiley is soon to be a mother and Dr. Wiley will be Pa to a bouncing little Wiley. Could anybody, however unfriendly to the great and good food expert, let his enmity for Wiley the official overshadow his emotions of sympathy for Wiley the approximate papa?

Let it be remembered that Dr. Wiley is sixty-six. Here is another reason for gratitude and congratulation. Other men may have done better. A kind correspondent in Massachusetts sends us the results of a school examination in that state, and one of the pupils, fresh from his history studies, states that "Henry VIII, by his own efforts, increased the population of England 40,000." How old Henry was when his "efforts" ended is not known; but it is an interesting sidelight on history, and a fact hitherto overlooked by writers on that entertaining subject. It is introduced here not for any invidious reflection on Dr. Wiley, but merely to enable the reader to discern for himself whether Dr. Wiley suffers any by comparison with

Henry VIII. For all we know, Dr. Wiley may have beaten the monarch, only the records may be faulty. Vital statistics are not always complete in detail.

There is one drawback to this interesting bit of publicity. It may have been vitally necessary to divert the tide of opprobrium and distract the attention of the Moss committee, but it will take away to a certain extent from the publicity value of the interesting event when it happens. It will take very shrewd work to get first-page position for the news that Dr. Wiley is at last a fond papa.

A CASE OF HARD LUCK.

A well-known food commissioner of one of the largest states in the Union, who has been particularly conspicuous lately on account of his vigorous prosecutions of confectionery manufacturers for using alleged illegal glazes, had a harrowing experience in a recent prosecution. Details of the case are not essential, nor is it necessary that the identity of the food commissioner be particularized. Part of the prosecution consisted in the presentation of various "exhibits" of the candy for making and selling which the prosecution was being made. These were rather carelessly spread out on a table and various experts testified as to their unwholesome and poisonous characteristics. During a recess part of the evidence disappeared. It was found that counsel for both sides and several members of the jury had helped themselves, forgetful of the testimony of the harmfulness of the candy. It looked inviting and as it happened there were no ill effects. The court, when attention was called to the facts by a virtuous prosecutor, concealed his mirth and put on a wrathful air. A fine of \$10 was imposed on somebody for contempt of court. One of the jurors was still chewing the candy. Counsel for the defense proposed that this juror be discharged from the panel and the case terminated without him. After much argument, the case was dismissed, much to the relief of the prosecution.

We sincerely hope the \$10 fine was assessed against counsel for the defense. This thing of making a monkey out of an earnest and enthusiastic food commissioner cannot be too strongly condemned. If it is necessary to prevent future occurrences of such humiliating experiences, we favor locking the jury up in sound-proof rooms during the hearing of testimony. To let the jury get at the facts in such a raw and undignified manner is carrying things too far.

"INDUSTRIAL PEACE" AND "PURE FOODS AND DRUGS."

In announcing the annual meeting of the National Civic Federation, to be held in Washington, March 5th, 6th and 7th, a letter requesting the governors of the various states to send delegates to this meeting has been made public at the headquarters of the federation. The program provides for a special day on "Industrial Peace and Progress."

The "Industrial Peace," session will be presided over by Cardinal Gibbons, and it will be held in the Peace Hall of the Bureau of American Republics, on Tuesday, March 5th, at ten o'clock. The program for this day will be devoted principally to the consideration of the successful operation of the Erdman conciliation act, which has long maintained peaceful industrial relations in the business of interstate railways; and to the various effective methods of negotiation between em-

ployers and their employees as illustrated by collective bargaining in such lines as interstate, municipal and interurban railways, the large daily newspapers, the building trades, stove manufacturing, coal mining, brewing, and other industries.

On the third day of the annual meeting there will be sessions of the Federation's departments on various subjects, among which is listed "Pure Foods and Drugs."

THE REFEREE BOARD BEFORE CONGRESS.

The agricultural appropriation bill was submitted to the House of Representatives by the Committee on Agriculture on January 30th with a recommendation for the appropriation of \$30,000 for the carrying on of the work of the Referee Board of Consulting Scientific Experts for the coming year. This sum is not specifically stated in the bill, but the sum named is understood to have been named by Secretary Wilson as being required for the purpose, and the contingent appropriation covers it. This is against \$65,000 used for the Referee Board's work last year.

Representative Ralph W. Moss, of Indiana, Chairman of the Committee on Expenditures in the Department of Agriculture, is understood to be preparing an argument for presentation on the floor with respect to the Referee Board and the way in which it should be treated.

His view is that the board should not be carried along in the present anonymous way, but that it should be specifically provided for by legislative provision or else allowed to drop out entirely.

According to newspaper despatches, critics of the present situation say that they have no objection whatever to a large appropriation for the board, but they are chiefly concerned to get it put upon a definite legislative basis rather than the informal situation existing at the present time.

"BULLETINS" ON BENZOATE OF SODA.

Several of the state food commissioners have lately issued "bulletins" in which all of the old exploded and discredited lies about the origin and effects of benzoate of soda are revived and published as facts. This indicates either that officials who should know better are being made the abject tools of the "holier than thou" food tricksters through ignorance or are deliberately adopting that attitude for reasons best known to themselves. The whole situation will be reviewed in the March issue of the AMERICAN FOOD JOURNAL, and the subject will be handled without gloves.

DR. WAGNER RETURNS FROM EUROPE.

Dr. T. B. Wagner has returned from an extended tour in Europe, where he went in the interest of the Corn Products Refining Company. It is understood that Dr. Wagner will be in closer touch with the executive department of the organization henceforth, leaving the duties that he has formerly carried to subordinates.

SACCHARIN RULING POSTPONED.

Effectiveness of the ruling against the use of saccharin in foods has been postponed until March 1st, the three secretaries having not found time to review the subject before February 1st, the date previously set for the enforcement of the ruling.

Pending Food Legislation

In Congress.

House Bill No. 14060 (by Mr. Richardson). This bill is of so radical a character that its text in full, together with comments thereon from various sources, is appended:

That Sections 6, 7 and 8 of the Food and Drugs Act, approved June 13, 1906, be amended as follows:

Amend section six by inserting after the word "substances" the words "or device" and by inserting after the words "or other animals" the words "also soda and potash lye; also cosmetics, hair preparations and dyes and toilet preparations; also tobacco, snuffs, tobacco substitutes and all tobacco products," so that section six shall read as follows:

"SEC. 6. That the term 'drug' as used in this Act shall include all medicines and preparations recognized in the United States Pharmacopœia or National Formulary for internal or external use, and any substance or mixture of substances, or device, intended to be used for the cure, mitigation, or prevention of disease of either man or other animals; also soda and potash lye; also cosmetics, hair preparations and dyes and toilet preparations; also tobacco, snuffs, tobacco substitutes and all tobacco products. The term 'food' as used herein shall include all articles used as food, drink, confectionery, or condiment by man or other animals, whether simple, mixed, or compound."

Amend section seven by changing the word "a" to "any" in the phrase "is sold under or by a name," and transfer this amended phrase to the second line, immediately following the words "National Formulary."

Add after part second of the section the following:

"Third. If it contain any methyl alcohol or wood alcohol.

"Fourth. If any cosmetic, hair preparation or hair dye or toilet preparation contain any poisonous or deleterious ingredient.

"Fifth. If tobacco, snuff, or tobacco products contain any added poisonous or deleterious ingredient which may render such article injurious to health; or if any substance has been mixed or packed with these products so as to reduce or lower or injuriously affect their quality or strength; or if any substance has been substituted in whole or in part for the articles; or if they be mixed, colored, powdered, coated, or stained in any way whereby, damage or inferiority is concealed; or if they consist in whole or in part of filthy, decomposed, or putrid animal or vegetable matter," so that section seven, so far as it relates to drugs, shall read as follows:

"SEC. 7. That for the purpose of this Act an article shall be deemed to be adulterated—

"In the case of drugs—

"First. If, when a drug recognized in the United States Pharmacopœia or National Formulary is sold under or by any name, it differs from the standard of strength, quality, or purity, as determined by the test laid down in the United States Pharmacopœia or National Formulary official at the time of investigation: *Provided*, That no drug defined in the United States Pharmacopœia or National Formulary shall be deemed to be adulterated under this provision if the standard strength, quality, or purity be plainly stated upon the bottle, box, or other container thereof although the standard may differ from that determined by the test laid down in the United States Pharmacopœia or National Formulary.

"Second. If its strength or purity fall below the professed standard of quality under which it is sold.

"Third. If it contain any methyl alcohol or wood alcohol.

"Fourth. If any cosmetic, hair preparation or hair dye or toilet preparation contain any poisonous or deleterious ingredient.

"Fifth. If tobacco, snuff, or tobacco products contain any added poisonous or deleterious ingredient which may render such article injurious to health; or if any substance has been mixed or packed with these products so as to reduce or lower or injuriously affect their quality or strength; or if any substance has been substituted in whole or in part for the articles; or if they be mixed, colored, powdered, coated, or stained in any way whereby damage or inferiority is concealed; or if they consist in whole or in part of filthy, decomposed, or putrid animal or vegetable matter."

Amend section eight as follows:

After the word "food" add "or drugs"; and further amend

section eight after the words "any particular" by adding the following: "or when represented to the public in any way as having any remedial property, or if the compounder, manufacturer, or vender thereof is not authorized both under the law of the state or community where the article is produced, manufactured, or offered for sale, directly to the consumer, to practice medicine or pharmacy, or both, as the case may be; or if the label or labels or any advertisement, poster, circular, or otherwise, contain any false or misleading claims or representations relative to disease or symptoms of disease, to be read or intended to be read by the laity, which are intended or calculated to produce in the minds of persons reading them or to whom the same may be read, a false impression of the existence of disease in their own bodies, or if any statement or expression of opinion concerning its physiological, therapeutic, nutritive, or remedial property be made or promulgated in any manner so as to deceive or mislead, or which shall deceive or tend to deceive the purchaser, or if it be a drug offered for sale to the laity, directly or indirectly, which contains any habit-forming or deleterious ingredients, to-wit, acetanilid, antipyrin, acetphenetidin, anesthesin, alcohol, aspirin, alpha and beta eucain, arsenic, barium salts, carbolic acid, caustic hydroxides, chloroform, chloral, cocaine, creosote, cantharides, croton oil, caffeine, cannabis, heroin, holocain, hydrocyanic acid, lead salts, morphin, methyl alcohol, mercury salts, novocain, nux vomica, orthoform, phenacetin, the phosphides, theobromin, theophyllin, trional, stovain, strychnine, vermol, yellow phosphorus, cotton root, ergot, pennyroyal, rue, savin, tansy, the poisonous alkaloids, all heart depressants or excitants, or any compound or preparation or derivative of any of the foregoing, and to any food or drug product which is falsely branded as to the state, territory, or country in which it is manufactured or produced."

After the word "produced" at the end of the first paragraph of section eight, further amend section eight by adding the following:

"All these articles or preparations or derivatives shall bear a label containing not only the name by which they are known, but also the names of the parent substances from which they are derived," so that said section eight as amended shall read as follows:

"SEC. 8. That the term 'misbranded' as used herein shall apply to all drugs or articles of food or articles which enter into composition of food or drugs, the package or label of which shall bear any statement, design, or device regarding such article, or the ingredients or substances contained therein, which shall be false or misleading in any particular, or when represented to the public in any way as having any remedial property, or if the compounder, manufacturer, or vender thereof is not authorized both under the law of the State or community where the article is produced, manufactured, or offered for sale directly to the consumer, to practice medicine or pharmacy, or both, as the case may be; or if the label or labels or any advertisement, poster, circular, or otherwise, contain any false or misleading claims or representations relative to disease or symptoms of disease, to be read or intended to be read by the laity, which are intended or calculated to produce in the minds of persons reading them or to whom the same may be read, a false impression of the existence of disease in their own bodies; or if any statement or expression of opinion concerning its physiological, therapeutic, nutritive, or remedial property be made or promulgated in any manner so as to deceive or mislead, or which shall deceive or tend to deceive the purchaser; or if it be a drug offered for sale to the laity, directly or indirectly, which contains any habit-forming or deleterious ingredients, to-wit, acetanilid, antipyrin, acetphenetidin, anesthesin, alcohol, aspirin, alpha and beta eucain, arsenic, barium salts, carbolic acid, caustic hydroxides, chloroform, chloral, cocaine, creosote, cantharides, croton oil, caffeine, cannabis, heroin, holocain, hydrocyanic acid, lead salts, morphin, methyl alcohol, mercury salts, novocain, nux vomica, orthoform, phenacetin, the phosphides, theobromin, theophyllin, trional, stovain, strychnine, vermol, yellow phosphorus, cotton root, ergot, pennyroyal, rue, savin, tansy, the poisonous alkaloids, all heart depressants or excitants, or any compound or preparation or derivative of any of the foregoing, and to any food or drug product which is falsely branded as to the State, Territory, or country in which it is manufactured or produced. All these articles or preparations or derivatives shall bear a label containing not only the name by which they are known, but also the names of the parent substances from which they are derived."

The Bulletin of the National Association of Retail Grocers comments on this bill as follows:

"This bill has been introduced at the instance of the American Medical Association, and will, if passed, practically prohibit any single enterprise or general store other than a drug store from keeping for sale any of the articles mentioned above.

"There are very few stores who are not handling some of the goods in question and many of them rightly belong in a grocery stock. All general merchants carry a very large stock of these patent and household medicines and it would indeed be unjust not only to the storekeepers themselves but to the patrons who would be obliged to secure a doctor's certificate before being able to purchase even common household remedies. The fact is, the intention of this bill is to abolish self-medication in any form and prevent the sale of proprietary medicines, no matter what their value. It would also prevent the sale of any drug by general merchants or grocers. If you wanted a dose of salts, a bottle of castor oil, witch hazel, bay rum or even a bottle of toilet water, under this bill you would have to get a prescription from the doctor for it, or purchase same from a retail druggist, which means the sale of these goods is to be given absolutely to the retail druggists.

"It would also prevent absolutely the sale of even the simplest proprietary medicines. The long list of drugs which it would be unlawful to incorporate in any preparation practically eliminates the use of the effective remedies of modern medicine."

The *Western Druggist* comments as follows:

"It will be noted also that the bill unqualifiedly prohibits the sale of any remedy containing any one of a long list of things, including acetanilid, aspirin, chloroform, phenacetin, nux vomica, heroin or even alcohol!"

"If now the bill should contain a clause reading that any physician who should make a 'false or misleading' diagnosis, or should say or do anything which might give rise to a 'false impression,' or should fail to know all that it is possible for the human mind to understand here or hereafter, or should give a remedy that failed to effect a cure, or should accept a fee in any case where the patient failed to recover, or should be guilty of any error, mistake or lack of information of any kind—if, we say, the bill proposed to punish the doctor by fine or imprisonment for any one of these offenses, it might at least have a little consistency to commend it and be saved from classification as a measure dictated wholly either by insane medical partisanship or by a degree of imbecility approaching the pathetic."

House Bill No. 18427 (By Mr. Sabath). An oleomargarine bill.

House Bill No. 18493 (By Mr. Levin). An oleomargarine bill.

House Bill No. 19338 (By Mr. Haugen). This bill provides for a reduction of the internal revenue tax from ten cents per pound to one cent, and a decrease of the special annual tax imposed on manufacturers from \$600 to \$240.

The bill states that "certain manufactured substances and certain mixtures and compounds, including such mixtures and compounds with butter, shall hereafter be known and designated as 'margarin,' namely, all substances heretofore known as oleomargarine, oleo, butterine and all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suime, neutral, lard extracts, tallow extracts, tallow, animal fat, suet, lard, lard oil, vegetable oil, annatto, or other coloring matter, made in imitation or semblance of butter, or, when so made, calculated to be sold as butter or as a substitute for butter."

As regard the imposition of special taxes, the bill provides that manufacturers of margarin shall pay \$240 per annum; wholesale dealers \$120 per annum and retail dealers \$6 per annum. Every person who sells margarin in quantities of less than ten pounds at one time, is to be deemed a "retail" dealer.

Section 4 contains these provisions as to the packing and branding of margarin: "That all margarin shall be put up by manufacturers in their manufactories in separate prints or bricks of one-half or one pound, and in no larger or smaller quantities, in cartons or metal or fiber containers. Such cartons or metal fiber containers and all coverings or wrappers of prints or bricks shall have printed or branded conspicuously upon them the word 'margarin' in block letters which shall be not less than one-half inch square in black or nearly black upon white or light ground so placed as to be the only marking upon one side or surface of the print or brick, except the revenue stamp hereinafter mentioned. Other marks, prints, or labels than those mentioned in this law, with the exception of the shipping mark used in commerce, must be approved by the Secretary of Agricul-

ture before such marks, prints, or labels may be used by the manufacturers. Copies of all approved marks, prints, or labels must be kept on file and accessible to the officers or agents of the Department of Agriculture at the office or place of business of the manufacturer. Such packages shall then be packed by the manufacturers thereof in wooden or other containers, each containing not less than ten pounds, which shall be marked or branded as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe.

"The internal revenue stamp or stamps shall be so affixed to such one-half and one-pound packages as to seal them securely, so that such packages may not be opened without destroying the stamp or stamps affixed thereto; and all sales made by manufacturers of margarin and by wholesale dealers in margarin shall be of packages containing not less than ten pounds. Retail dealers in margarin shall sell only the one-half and one-pound packages, to which the tax-paid stamps are affixed in such manner as to seal them securely, and in quantities of less than ten pounds at one time . . ."

House Bill No. — (By Mr. Webb). This bill provides: "That the shipment or transportation in any manner or by any means whatsoever of any spirituous, vinous, malted, fermented, or other intoxicating liquor of any kind, including beer, ale, or wine, from one State, Territory, or district of the United States, or place non-contiguous to, but subject to the jurisdiction thereof, into any other State, Territory, or district of the United States, or place non-contiguous to, but subject to the jurisdiction thereof, or from any foreign country into any State, Territory, or district of the United States, or place non-contiguous to, but subject to the jurisdiction thereof, which said spirituous, vinous, malted, fermented, or other intoxicating liquor is intended, by any person interested therein, directly or indirectly, or in any manner connected with the transaction, to be received, possessed, or kept, or in any manner used, either in the original package or otherwise, in violation of any law of such State, Territory, or district of the United States, or place non-contiguous to, but subject to the jurisdiction thereof, is hereby prohibited; and any and all contracts pertaining to such transactions are hereby declared to be null and void, and no suit or action shall be maintained in any court of the United States upon any such contract or contracts, or for the enforcement or protection of any alleged right based upon or growing out of such contract or contracts, or for the protection in any manner whatsoever of such prohibited transaction."

The *New York Journal of Commerce* says in regard to this bill:

"It is hardly conceivable that such a bill should be seriously entertained in either house of Congress, but its introduction illustrates the propensity for calling upon the Federal Government to help in carrying out any policy favored by a state, to which it is unable to give the rigid application that a majority of its people are supposed to desire. Some years ago certain prohibition states of the west undertook to prevent by their own laws the shipment or transportation into their limits from without of any spirituous or intoxicating liquors for any use or purpose. The United States courts speedily held that this was an attempt to regulate interstate commerce in these particular commodities, which was exclusively within the Federal jurisdiction, and declared that no State could exclude them if they were transported and delivered in the original packages.

"Now at least one prohibition state in the south, at least one representative of that state in Congress, is demanding that the Federal Government exercise its authority to prevent the intrusion of spirituous liquors within its limits. The constitutional power of Congress to make any such discrimination against certain commodities or between different States in regulating interstate commerce, is more than doubtful; but, apart from that, such legislation would be an intolerable outrage. To say nothing of the absurdity of calling upon the Federal Government to aid the states in the enforcement of such a policy for regulating the trade and the habits of its people, there are many uses of alcohol and of liquors containing spirit in one form and another, in industrial arts and in medical practice, which have no relation to the legitimate object of such a policy. Years ago attempts were made to get a prohibition amendment into the Federal Constitution. These appear to have been given up; but, until such an amendment is secured, the Federal authority can hardly be used to enforce the prohibition legislation of different states."

Kentucky.

House Bill No. 117. Section 2 of this bill provides as follows:

"Section 2. In all cases where any articles of food for man, or any article that may be used as a constituent part thereof in any way, is sold or offered or kept for sale in a coked, sealed or wrapped can, box, bottle, package, or other receptacle, or in such manner that the consumer thereof may not examine and discover and know the month and year when such article was canned, preserved, packed, bottled, wrapped or manufactured, before purchasing the same, then in every such event such can, box, bottle, package, or other receptacle containing such article, shall have plainly labeled, stamped, or printed thereon the year and month in which such article was first canned, boxed, wrapped, bottled or preserved, as the case may be."

Massachusetts.

House Bill No. 198. This bill establishes bushel weights for various commodities and regulates the sale of vegetables.

House Bill No. 179. To prevent discrimination in the sale of commodities; an anti-trust act.

House Bill No. 323. Provides for inspection of bakeries by the State Board of Health.

House Bill No. 1021. Provides for the sale of nuts and vegetables by weight and measure.

House Bill No. 1255. Relates to candy containing minerals.

House Bills Nos. 1319 and 1459. Relate to the sale of vinegar.

Mississippi.

House Bill No. 135. This bill has a provision regulating the sale of soft drinks and ice cream by bonding the vendor in the sum of \$2,000. This should be called the "blind pig license bill."

New York.

Int. No. 138. Relates to the sale of foods by weight, measure or numerical count, with certain exemptions.

South Carolina.

A proposal before the Legislature of South Carolina amends Sections 6 and 7 of the food law approved February 20, 1907, by giving the Commissioner of Agriculture power to appoint inspectors. Changes in the method of conducting the state laboratory are also provided for.

Virginia.

Senate Bill No. 4 (By Mr. Hart). Provides for standards of weight and measure for cotton seed and its products.

Senate Bill No. 13 (By Mr. Gravatt). Declares when seeds and foods are to be sold by avoirdupois weight.

Senate Bill No. 15 (By Mr. Gravatt). Provides for net weight branding on canned and package goods, except packages of candy and shelled nuts not exceeding ten cents in value, and allows for reasonable variations.

Senate Bill No. — (By Mr. Fitzhugh). Provides that articles of food shall not be held in cold storage longer than nine months, and that they shall be dated when placed in cold storage.

Virginia also has a legislative proposal making certain changes in the common law of barter and sale of all commodities, by which the status of a sale made by sample or through an agent by a person or firm outside of the state shall be changed.

A MOUNTEBANK IN PUBLIC OFFICE.

(From a special correspondent.)

WASHINGTON, D. C., February 10, 1912.

"Nothing so impossible in nature but mountebanks will undertake."

What means this declaration of war against the Remsen referee board—grim-visaged, devastating war—and the historic citadel of Washington aglow with patriotic fervor? Don Quixote Wiley, with a baleful glitter in his eye, hath assembled his valiant knights in battle array. With clanking armor, astride their fiery, snorting steeds, they go forth to battle with the Remsen octopus. Above the fearful crash and din of battle will be heard the shrieks of the wounded and the heart-rending moans of the dying. Bloody chasms and horrible abysses will now engulf the carcasses of Hydra-headed Remsen monsters, while the whole earth is made sickly pale and greenish in its stupendous glare. Massacre, pillage and carnage will follow in the wake of Wiley's avenging legions, wading knee deep in the gore of Remsen demons flowing in an American stream.

Undemocratic as may be the proposal to fix no limit to the power of this one man, it is accompanied with vitriolic attack

and base assault upon the scientists of our foremost universities.

Why is this referee board of scientific experts smirched with suspicion and sprinkled with mud, thrown wanton from the camp of personal ambition? Remsen, Chittenden, Long, Taylor and Smith, leaders in the science of physiological chemistry, basely misrepresented, none of them escaping the brand of calumny, in open charge, or implied in sneering innuendo, circulated with demagoguery that is akin to knavery; their enemies groveling in deceit, hypocrisy and lies, to sprinkle them with ink and mud, snatched from the pool of enmity.

Dr. Wiley today is the popular idol. He stands for a principle that all of us endorse. With his flamboyant platitudes and dramatic pose as champion of the people, he shrewdly plays upon the sentiment and rightful demand of the public for pure foods. When he bellows to an audience that he will not permit the food poisoners to put their harmful products into the stomachs of our people, his listeners clap their hands and shout with joy, as if he had enunciated a new principle, not realizing that the law is now six years old and he has not yet found a food product containing poison. Nine-tenths of his prosecutions, or rather persecutions, have been based solely upon flimsy technical charges of misbranding; yet when he shouts to a woman's convention, "Save your babies instead of your pigs," thunderous acclaim again greets him, as if he had once more enunciated a new principle.

His charges of harmfulness against the four products which were referred to the Remsen board were based purely upon theory; upon his personal opinion. A mere guess, with no physiological experiments to support his theory or personal guess. He testified before the Moss investigating committee that he favored suppressing certain industries pending experiments by the referee board of scientific experts. This means that if he entertains a theory supported by no facts, he would utterly destroy an industry over night and then permit somebody to rebuild it after investigations disprove his theory. This somewhat parallels the Russian policy of convicting a man and trying him at leisure, but Dr. Wiley goes further; he believes in hanging a man and ascertaining his guilt or innocence after his death.

The subtle methods which have so craftily bamboozled the public are as in a looking glass to men who also see the miserable littleness behind self-advertised fame; so let us prick this bubble. Is the public health protected by complaints under flimsy charges of misbranding, such as those instituted against "Scotch Oats" because the oats are not grown in Scotland; "India Relish" because it is not produced in India; "Peroxide Cream" because the mixture contains more cream than peroxide?

Few of the manufacturers prosecuted under flimsy charges of misbranding were willing or financially able to stand the expense of lawyers to defend them; they found it cheaper to plead guilty and pay small fines. Many of them were innocent manufacturers furnishing amusing pastime to a huntsman who shoots his partridges on the ground—a "pot hunter"; yet now comes the subtle, astounding proposal that the power to destroy legitimate, reputable industries over night should be invested in this one man. A tremendous volume of light should be turned on this remarkable proposal.

The Remsen referee board of appeal, composed of America's leading scientists, has already prevented the destruction of reputable industries, while still protecting the public health. We have appeal courts in law. They are for the protection of private and public property. The Remsen referee board is an appeal court of science, in the interest of the public health chiefly, but incidentally it protects property rights—manufacturing and farming—the fruit, corn, cane sugar and wheat growing industries—against reckless assault.

Dr. Wiley himself has expressly stated that he could not qualify as a physiologist, a chemist, a toxicologist, a physiological chemist, a pharmacologist or a doctor of medicine to the satisfaction of either the government or himself (see testimony Moss investigating committee, page 891); and yet he has the brazen affrontery and vain-glorious audacity to criticize these scientists of supreme achievement. Is Don Quixote riding for a fall?

Absolutism indeed! May God save the honest, legitimate food industries of this country, and the people themselves, from the pernicious meddling and persecution of this one man power. But enough of this malign proposal! We have our Congress as a bulwark against the conversion of the Bureau of Chemistry into a bureau of destruction; a Congress that believes in Lincoln's homely truism, "You can fool some of the people all the time and all of the people some of the time, but you can't fool all of the people all the time."

Household Science and the Table

THE GROWING FAVOR OF NUTS AS FOOD.

By Elenora Elizabeth Reber.

It requires no stretch of the imagination to conjure up in our minds a picture of primitive man using nuts as one of his chief articles of diet, and it is doubtless true that when he had progressed sufficiently to make him take a little thought for the morrow, and was inspired with the idea of storing foods, instead of depending upon the bounty of nature each day for his supplies, the hard-shelled nuts were the first things he laid away against time of future need or desire. And of all the attributes which the cave-man has handed down to posterity virtually unchanged the taste for nuts is most conspicuous, if indeed it does not stand alone. There are few people who do not have a natural liking for nuts, the taste for them being as unconscious, almost, as breathing. While it is true that we often hear people say they cannot eat nuts in quantity because they are too "heart," it is very rarely indeed that one hears the declaration that nuts are distasteful. Most of us have our preferences even

cared for in the digestive process and therefore distressing to them.

As to the purity phase of nuts as food, it would be exceedingly difficult to name any article of popular diet which it would be more impossible to adulterate. True there are nut meals and nut butters, and other by-products which are factory-manufactured that might not prove "true to name" but all of these can be made at home if desired and their purity will be absolutely assured. The larger volume of nuts are sold in the shells, or if the meats are shelled out whole and in condition to easily reveal any attempt to "treat" them. Also no way has yet been discovered to "plump" or restore to an original pristine appearance an immature or shriveled nut meat. True, the shells of nuts are often bleached or polished, but this does not affect the meat within the hard shell, and the only thing to guard against in the purchase of nuts is their age, as the meats of those too ancient will possibly be rancid. If the shells do not reveal that the nuts are old, the only way to ascertain the quality is by cracking, and it would not be amiss to ask the merchant to crack a few of



THE GRADING OF NUTS IN A CALIFORNIA ORCHARD.

in nuts, however, and there are some kinds which one may not relish so greatly as others. To the writer the sweet, delicately flavored pecan is the most delicious of all, while my second choice is almonds, but this is merely a matter of individual taste, and the fact that my preference falls upon the most nutritive of our nuts, is an accident for which my palate alone is responsible.

While nuts have been eaten by man throughout ages so far ago that the memory of man runneth not to the contrary, it is only comparatively recently that they have been given an enlarged place on our menus, being restored from the confines of the dessert course or their place as a confection, to standing in the salad, entree and even "piece de resistance" courses as well. The rightful place of nuts is as an integral part of the meal, and it is due almost entirely to the fact that they used them as an after course to a hearty dinner that so many people have found them improperly

the nuts when purchasing, if one has a suspicion that they are not of good quality.

Walnuts, almonds, pecans, chestnuts, Brazil nuts, peanuts, and numerous other varieties, in greater or smaller quantities, are staples of the nut diet. Let me remind you, however, that while greater quantities of peanuts are consumed than any other single variety (someone with a penchant for figures says 7,000,000 bushels by Americans), they really do not belong to the nut family at all, but are a leguminous product and would be more correctly called a bean. Most of our peanuts are grown in the South, Virginia being the largest producer of any state in the Union. Brazil nuts are practically all imported and, as their name indicates, they come from Brazil. Large quantities of almonds are imported from Spain and walnuts from France, although these two varieties are also raised in considerable quantities in California. Pecans come from the more southern states, Texas

orchards furnishing the larger percentage to our markets.

In those places where nuts are raised in commercial quantities and as an independent industry the nut harvest is quite a different thing from the old-fashioned nutting parties that used to go out into the woods and gather up the nuts with shouting and merriment. Yet harvesting walnuts in California, for instance, is very simple as most of the nuts do not have to be picked from the trees, but of their own accord drop to the ground at maturity. Still considerable attention must be paid to gathering the crop in order to have clean, bright nuts that will command a good price. In some sections the nuts start to fall in September when the harvest begins, and extends into October, sometimes even to early November. The nuts are collected from the ground as rapidly as they fall, for they soon absorb moisture and deteriorate in flavor and color if allowed to remain for any length of time. As the larger walnut sections are along the Coast where damp fogs and dews prevail during harvest time, making the husks quite moist the shells of the nuts inside sometimes become stained by the acid of the husks, and for this reason walnuts are washed and dried, and sometimes bleached before being marketed. The nuts are graded as to size by being passed through a wire cylinder which permits the smaller sizes to drop through the mesh. Almonds are harvested in much the same way, as indeed are other kinds of tree nuts. But we are not so much interested in the way nuts are handled in commerce as in their value as a food, and how to utilize them advantageously in culinary processes.

It is interesting to compare the constituents of our most popular nuts with some of our richest and most common foods of other characters, and for this purpose the following table is given:

	Water.	Protein.	Fat.	Carbo-hy.	Calories, per lb.
Almonds	4.8	21.0	54.9	17.3	3,030
Pecans	2.9	10.3	70.8	14.3	3,445
Walnuts	2.8	16.7	64.4	14.8	3,305
Chestnuts	31.0	5.7	6.7	39.0	1,115
Roasted peanuts.....	1.6	20.5	49.2	16.2	2,950
Cheese	34.0	25.9	33.7	2.4	1,950
Sirloin beef	61.0	19.0	19.0	....	1,155
Bread	35.3	9.2	1.5	53.1	1,215
Eggs	73.7	13.4	10.5	....	720

The conspicuous feature of the above table is shown in the low content of water, and high content of fat in the nuts, and the high water content of other foods. It will also be



NUT SALAD SERVED IN GLASSES.

noted that the nuts are good tissue builders and the calories, or units of heat, produced by them is very large. Of the nine foods given in this table it will be seen that pecan nuts lead them all in the calories per pound with walnuts coming a close second. Of the nuts, chestnuts alone are shown to produce less calories per pound than either cheese, beef or bread, although much more than eggs, which latter contain so much water. A pound of roasted peanuts represents almost as much fuel value as a pound each of beef, bread and eggs all combined, yet how many people realize when enjoying a generous helping of salted peanuts that they are eating sufficient heat producing food to accomplish the same dietetic result as though they consumed a very large portion of beefsteak?

It is exceedingly important to the well being of the consumer that all concentrated foods, such as nuts afford a conspicuous example, be well masticated. Because so many people fail in this important feature is a fruitful cause of di-

gestive trouble from eating nuts, and the difficulty of sufficiently impressing this necessity upon so many individuals is the reason for the advocacy of the use of nut meals and nut butters in greater quantities.

"Nuts are a complete and most wholesome substitute for meat of all descriptions, presenting the choicest and most concentrated nutriment of all food substances," says one authority. "They are a natural source of fat, affording it in great abundance and in a most assimilable form. In nuts fats are presented in an emulsified form, that is, as in cream, and



NUT CAKE.

it is for this reason that nut-fat is so readily absorbed by the system."

One or two ounces of nuts are a sufficient quantity at each meal. The combinations which may be made of them in various forms either alone or with vegetables, fruits or cereals, in salads and other kinds of dishes are sufficient to fill a volume. Chestnuts differ from other nuts as to food value in that they contain less tissue-building material and fat, and a comparatively large percentage of carbo-hydrates. For this reason they are a very suitable accompaniment for meats, or can be used in place of other starch foods or sweet dishes. A preliminary blanching process is always necessary, in whatever way one may desire to use them, as one must get rid of the husk and inner brown skin. A good way is to make a slit in the shell with a sharp knife, then cook for a minute in hot water, after which drain and dry. Then shake over the fire or place in a hot oven for a few minutes. Treated in this way the shell and skin will readily come away together, but one should work rapidly for they are most readily removed when hot.

The blanched chestnuts may be cooked gently until tender in water, stock or milk, to cover. When milk is used a double boiler is necessary. For use as a vegetable serve the chestnuts whole with cream sauce or a nicely seasoned sauce made from the stock they were cooked in, or a good brown sauce is palatable also. The use of this kind of nuts in turkey dressing is well known and flank steak rolled and braised with chestnut stuffing is an economical yet palatable dish.

Fruit and nut salads are among our most palatable dishes and may be formed in almost any way the fancy dictates, for there is no fruit with which nuts may not be mixed without fear of results over the combination. A dainty salad may be made by mixing slices of orange and banana. Put in a glass, pour over a light French dressing and place unbroken halves of walnut meats on top.

The combination of fruit and nuts is always good and a dish or basket of bright-colored fruits mixed with uncracked nuts is invariably artistic and effective as a centerpiece, and has the advantage also of being inexpensive and easily secured.

Following are a number of excellent recipes in which nuts form an important part:

Almond Butter: Blanch almonds, gently dry the nuts in baking pans in an oven until crisp, but not brown in color. Then run them through a loosely adjusted mill or sausage grinder, and place on a cloth stretched over the stove until perfectly dry, after which grind in a tightly-adjusted nut-butter mill. The heat of the mill frees the oil in the nuts and renders the whole a semi-fluid mixture. This preparation freshly prepared is recommended as a delicious substitute

for cow's milk and does not produce gastric disturbances of any kind.

NUT LOAF.

Take one cupful of ground hickory and peanuts mixed, two cupfuls of breadcrumbs, two cupfuls of water or milk, one teaspoonful of salt, one-fourth teaspoonful of pepper, a pinch of mustard and allspice for the ingredients. Add water or milk until the mixture is soft, then roll and place in a thin cloth and steam forty-five minutes. Serve with cranberry jelly or tomato sauce.

NUT CAKE.

Take four ounces of walnuts, two ounces of blanched almonds, half a pound of castor sugar, four ounces of flour, yolks of twelve eggs, and the whites of eight beaten very stiff. Pound the nuts with a little water until smooth, place them in a bowl, add the sugar, and stir well, and beat until white and light; then add the flour and the beaten whites of the eggs; bake at once in a plain mould. Cover the top with a light caramel and sugared almond meats, and ornament with frosting as elaborately as wished.

WALNUT CREAM.

Blanch a quarter of a pound of shelled walnuts and mince them up small, and then pound them with a dessertspoonful of castor sugar. Dissolve half an ounce of gelatin in a half pint of boiled custard, which has been made with two fresh eggs, a half pint of milk, and four ounces of sugar, and when cool stir in the nuts, the strained juice of a lemon, and half a pint of cream-whipped stiff with the whites of two eggs.



FRUIT AND NUT CENTERPIECE.

When the custard is cold beat it gradually into the cream, whisk till spongy, and then quickly pour it into a mold. When this is set turn onto a glass dish and garnish with heaps of whipped cream, on which place caramel walnuts. For these latter boil the juice of two lemons with two ounces of castor sugar till it turns to caramel, dip in the halves of walnut meats and coat them well, drain and dry, when they are ready to be used as directed.

NUT PARSNIP STEW.

Wash, scrape and slice thin two good-sized parsnips, and cook until perfectly tender in two quarts of water. When nearly done add a teaspoonful of salt, and when thoroughly done a tablespoonful of flour mixed smooth with a little cold water, stir well, and let boil until the flour is well cooked, then stir in one-half cupful of nut meat, let boil up once and serve immediately.

PEANUT MEATOSE.

Dissolve one cupful of cornstarch in two cupfuls of tomato juice, add two cupfuls of peanut butter and two teaspoonfuls of salt. Stir for five minutes then pour into cans and steam for four or five hours.

NUT WAFERS.

Nut wafers are dainty cakes, well adapted for serving with ices, creams or fruits, and are easily made as follows: Cream one-fourth of a cupful of butter, add gradually half a cupful of powdered sugar, then in small portions alternately, a cupful of flour and one-fourth cupful of milk. Beat well and flavor with vanilla. Using a broad, long-bladed knife, spread the mixture very thinly on the bottom of a buttered dripping pan, inverted, sprinkle with finely chopped nuts and bake in a slow oven until delicately browned. Remove the pan to the back of the range and cut the wafers into squares or sticks while still warm.

Hints About the Preparation of Apples.

Apples have been called the "King of Fruits," and the

term is an apt one, and it is especially appreciated because it is, perhaps, the only winter fruit that can be obtained in fresh condition in many sections where markets are not so generously supplied as is the case in the largest of our cities. This indispensable fruit is so good with plain cooking in simple old-fashioned ways, that some people think they are justified in thinking there is not much need of elaboration in its preparation for the table, yet apples also lend themselves readily to an immense number of variations and combinations that make the fruit fit for more dainty service.

One might say that it would be almost impossible to make a mistake in cooking an apple, so adaptable is it, yet in reality it is an easy matter to spoil the fruit. To begin with the moment the skin is broken there is no time to be wasted. It is characteristic of fruit acids that careful handling and rapid cooking are important if one would avoid any deterioration of flavor. Any long exposure of cut surfaces to the air is undesirable, and contact with baser metals must be shunned also. An earthen or agate dish and a silver knife or spoon are the proper utensils to use. A light hand and a quick fire are requisite for perfection even in making the simplest dish of apple sauce. With long and slow cooking even the best apples will give poor results, while from inferior apples a much better product may be had with good management. Skill and good judgment will do much to develop and lighten a low flavor, if they are brought to bear upon the seasoning of the dish. Sugar alone is often not sufficient while over-sweetening of apples is a common fault. A little lemon juice often adds the desirable quality to apples that are lacking in flavor, and orange, almond, cinnamon, nutmeg or clove all are among the additional aids from which to choose on occasion. Water should be used sparingly with apples; the best sauce requires very little.

If one wishes to elaborate, the apple will be found available for fancy cooking in such combinations as apple fritters, apple custard, apple tarts, all of which explain themselves with the mere mention. Combinations with gelatin, lemon and white of an egg make attractive and delicate jellies and sponges, which may be made as tasteful and artistic as desired with the judicious use of common methods of ornamentation of such dishes. In salads apples and nuts make an especially happy combination.

Ways to Serve String Beans.

The first requisite of string beans when cooked is that they must be tender. It may be that there are instances when beans are boiled too long, but this is seldom the case, the tendency of most cooks being to err in the opposite direction. There is a difference between having string beans tough and having them crisp.

There are not many sauces which may be used with string beans and when sauces are added they should be as simple as possible. A white or cream sauce for boiled string beans is made with just a little butter mixed with cream, and thickened with potato flour. As a rule the most generally palatable way to serve the beans is to heat them in butter, and simply season with pepper and salt. Another way is to put a generous piece of butter into a saucepan, let it melt and brown, then add a few drops of lemon juice and season with salt and paprika, and in this warm the beans after they have been boiled and drained. Some people like to add to this mixture a little chopped parsley or the flavor of an onion. In this one must be governed by the preferences of those whom they are to serve.

When preparing string beans for salad it is a good idea to have the salad idea in view from the beginning as in this way a more "tasty" dish may be evolved than when left-over beans are utilized. Boil the beans and use water for their boiling that is savory. This may be accomplished by flavoring with chicken or veal stock, for instance; or boil an onion with the beans. Drain the beans carefully after cooking, and while still hot pour over them a dressing of oil, vinegar, pepper and salt, and set them away until thoroughly cold. It is not usually wise to try to combine beans with any kind of meat when concocting salad.

FOODS SENT BY ENGLISH PARCELS POST.

The various uses made of the parcels post in England are indicated by the report showing that during the holiday season of 1910 the articles held at the postoffice because insufficiently addressed included 100 turkeys, 300 brace of pheasants, 800 parcels of poultry, 300 parcels of eggs and butter and 250 plum puddings.

THE APPLE A VALUABLE BRAIN FOOD.

Because it has more phosphoric acid in easily digested shape than any other fruit, the apple is one of the best brain foods.

What the Other Fellow Thinks

Investigating High Food Prices.

District Attorney Whitman has wisely decided to transfer the inquiry into the prices of butter and eggs from the Grand Jury to a city magistrate, where there can be open hearings, and to extend it to other food products. Grand Jury investigations are secret and have for their sole object ascertaining whether there is any violation of law back of the complaints which it receives. If none is found that is the end of the matter and nobody is the wiser for the evidence taken. If indictments are found the public has to wait for evidence at trials to learn what they are based upon, and then the information is limited to what may be brought out by evidence that is technically pertinent to a particular case. In view of the general complaint of high prices of food and the consequent dissatisfaction and suspicion of "combines" among dealers to put prices up, it is desirable to have a wider inquiry and one that is open to the public in order that there may be real enlightenment on the subject.

There are many allegations from irresponsible sources of a wide difference between the prices the producer gets for butter and eggs this season and what the consumer has to pay, and we see statements in print that the dealers are getting a profit ranging from 40 to 100 per cent. This does not seem at all likely, in view of the difficulty there must be in restraining competition in the markets to any such extent as this would imply. On the other hand, reputable dealers are quoted as declaring that the margin between the producers' and traders' prices is unusually narrow. It is well known that the production of these particular articles varies greatly with the seasons of the year and from year to year, and in spite of cold storage the supply cannot be very closely adjusted to the demand.

It is said that the season of 1910 was unusually favorable and a large surplus was carried over in cold storage, for which the time is now limited by law in this State, but that last season was much less favorable on account of the dry summer and the present supply is much smaller than that of a year ago. If this is so, there is a legitimate reason for the higher prices, for consumption does not readily adjust itself to a lessened supply and the insistent demand will put prices up. The producers will be as ready as dealers to take advantage of this condition and cannot be prevented from doing so. Complaint and dissatisfaction are not evidence and suspicion of "trusts" and "combines" is not sufficient ground for condemning the trade in food products as wickedly engaged in levying tribute upon the daily needs of the people. What is needed is facts which shall make the matter fairly understood so that justice may be done to all concerned. If prices are high because supply is short in comparison with demand for certain articles of food there is no cure but economy in consumption. If dealers are making prices artificially high by combining to control supply or restrain competition in selling they ought to be exposed and to be punished if they are violating law.—*New York Journal of Commerce*.

Difficulties of Standardizing Food Products.

On the grounds that there was no standard for salad dressing, that it was not an imitation of any other product and so long as it contained nothing deleterious to health, the New York supreme court recently decided that the manufacturers were not compelled to state the ingredients on the label. It would appear that the attempt to standardize all food products it being carried to undue lengths. There are many foods which are perfectly pure, yet their quality is such as would not commend them to those who are able to purchase a better quality of the same class. But to raise the grade of these lower class goods to those of the better class would put them out of the reach of the poorer people. Take, for instance, the case of mincemeat. The great bulk of commercial mincemeat contains little or no animal meat, not merely because of cheaper ingredients, but because wholly vegetable ingredients keep better and give more general satisfaction. No one was deceived, because no one had any standard of comparison nor wanted any. To require that mincemeat shall contain not less than 10 per cent of animal meat, as is proposed by Dr. Wiley, would increase the cost of living to the poorer class of people, and make it prohibitory to those people who do not use meat in any form. Mincemeat is a generic term which has been applied for years to a product composed sometimes wholly of

chopped fruits and vegetables and sometimes having the addition of chopped meat, nuts, etc. So long as the ingredients of mincemeat are pure no harm is done, whether it contains animal meat or not. If people who can afford or desire mincemeat that contains 10 per cent or more of animal meat they can obtain it, but that is no reason why those whose pocket-book will not allow them to indulge in higher quality should be deprived of enjoying a perfectly wholesome food product which satisfies them. If a standard is to be applied to all food products then we shall have standardized plum pudding, clam chowder, French mustard, pumpkin pie, sausage, curry powder and numberless other things, all of which are made by different recipes to suit the taste of the consumer. So long as the ingredients of a food product are absolutely pure there is no occasion for changing the present order of things. What might be the standard for one person would probably not suit the taste of another. Again, the standard may be put at such a point that it would materially increase the cost of living. By all means give the people pure food, but let them be the judge as to the standard of quality they desire.—*Seattle Trade Register*.

Possibility of Creating a Dictatorship.

An element of flattery enters into the final report of the Congressional committee appointed to investigate into the charges preferred against Dr. Wiley, chief of the bureau of chemistry. In the revolt of that official against his chief and his associates, the committee finds that he is the one blameless individual, censure indirectly falling upon the head of the department of agriculture, while Solicitor McCabe is held responsible for demoralizing the administration of the pure food law, the only attempt at a mild criticism offered being for the minor detail of entering into an agreement for the employment of the services of an expert at a compensation largely in excess of the maximum figure allowed by law.

Naturally, the essential details of the report, which was filed on Monday, have been anticipated since the hearings which were held some months ago. It was foreseen that the exoneration of Dr. Wiley was inevitable, and that the recommendation of Attorney General Wickersham that he be permitted to resign would not be favorably acted upon. Retailers and wholesalers, with a majority of manufacturers, as well as the public, believed that the retention of an able official was desirable, but there is room for a wide variance of opinion as to the desirability of giving Dr. Wiley undisputed sway in the enforcement of the pure food laws.

President Roosevelt recognized the fact that the chief of the bureau of chemistry was idealistic and radical in his beliefs, and the creation of the Remsen board, composed of the most eminent chemists of the country, for the purpose of reviewing his findings in cases where there was question as to their practicability, was a wise and salutary action, the result of an understanding of the characteristics and weaknesses of the doctor.

That the Congressional committee looks with favor upon the proposition of removing the restraining influence of this court of appeal is evidenced from the results of its findings, but if this course is acted upon there can be little doubt that a serious mistake will have been made. The character of the membership of the board is of itself a guarantee not only of its ability, but of its fairness and disinterestedness.

Dr. Wiley is constantly in the limelight, in consequence of the exploitation of radical and peculiar theories in the public prints. He has dipped into practically every department of industrial, commercial and social life, and given authoritative pronouncement as to the institution of departures that are needed, and in many directions his ideas are not only novel, but reveal a tendency towards giving currency to half-baked opinions that would not stand the test of a common-sense, practical application.

It is not only foolish, but decidedly dangerous to give such a man a free hand, with license to run amuck in the handling of affairs which affect the business of production and distribution of foodstuffs, the most extensive, as well as one of the most important elements in the industrial and commercial fabric of the country, and the interests affected should make a strenuous protest against the proposed policy of creating a dictatorship of the character and under the conditions indicated.—*West Coast Trade*.

Mr. Clerk, Call the Next Witness.

It would seem that the present high price of butter would stimulate the production of it, but such does not seem to be the case. Let the price be a high one or a low one, the output seems to remain about the same from one year's end to another. It must be remembered that the average dairy farmer in this country is a dairyman by chance and not by design.

He sells milk or cream because he happens to have it to sell; he never figures it as an asset, and, in fact, if nine out of ten of them were asked how much milk or cream they were selling they could not give an intelligent answer.

With these conditions prevailing we confess we can see but little hope for any change either in the method of production or the amount that will be produced. This will be so at least until we get a better class of dairymen on our farms, or until those now on them see greater need of more intense or better farming.

Butter is one of the most condensed products sold and it is produced at the greatest cost of both time and labor of any product of our farms, and the consuming public must be educated to the fact that these so-called high prices of butter are not high prices at all.

We are sometimes led to believe that the time will come when butter will only be found upon the tables of the wealthy. When the cost of rearing the calf to the age of the producing cow is considered, without any return whatever up to this time; then milking from her by hand one hundred pounds of milk from which is obtained a product weighing four pounds, it will be realized that there is a whole lot of work for a mighty small finished product, and we believe if these same farmers could be induced to sit down and figure up just what these four pounds of butter cost them, they would either mend their ways or quit the production of it entirely, and we incline to the opinion that they would choose the latter alternative and that we would have even less butter than we have now.—*Chicago Dairy Produce*.

Let's Go Out and Kick the Cat.

It is in some quarters looked upon as heresy or high treason or some such heinous offense to criticize a court decision, but an Indiana judge has recently rendered a decision which tempts one to risk the penalty for the mere satisfaction of relieving his mind.

Indiana has a pure food law, enacted in a moment of legislative sanity, and, moreover, which is a fact of equal importance, it has capable and fearless officers charged with the duty of enforcing it.

A provision in the Indiana law which is one of its valuable features, aims at protecting the public from the sale of impure milk. Recently the newspapers made public the fact that a certain dairyman had been found by the state inspectors to be selling contaminated milk to the public. The inspectors secured their evidence by purchasing a quantity of milk from the dealer, in which, upon examination, they found dirt and the dairyman was prosecuted for violation of the statute.

When the case came up in court the attorneys for the defense maintained that their client was not guilty of violating the law because it must be shown that the milk was purchased for human food, whereas it was purchased in this instance for purposes of analysis. The judge before whom the case came sustained the contention of the defendant's attorneys and held that the dairyman was not guilty of an offense under the Indiana food and drugs act.

This is one of those decisions which tends more than anything else to bring the courts and the law into disrepute and there have been so many such decisions rendered that it is little wonder that so many honest people have come to regard the courts as anything but tribunals of justice.

One paper reporting the case said it refrained from comment for fear of violation of the postal laws and, really, that seems comment severe enough.—*Eric (Pa.) Herald*.

Packers and Cold Storage.

The annual report of Secretary Wilson, reviewed in these columns last week, bears out in almost every detail the statements, facts and figures which representatives of the packers have furnished in connection with the bill now pending in the United States Senate for the regulation of food stuffs in cold storage and of the warehouses themselves.

It will be remembered that the Secretary made this the special feature of his report, after an exhaustive investigation. The investigation was made throughout the country and covered every detail of the business, and the information derived is of great value.

For instance, it is ascertained that only 3 per cent of the beef production, 4 per cent of the mutton and 11½ per cent of the pork goes into cold storage; the balance is sold "fresh." That is a point the packers had already brought out and they further contended that what did go into cold storage was held only a reasonable time.

The report of the Secretary shows that a very high percentage of the meat products is taken out of cold storage at

three months, and at seven months more than 99 per cent has been delivered for consumption.

All of which goes to prove that time-restricting bills are unnecessary, because commercial considerations make it practically obligatory to remove food stuffs from cold storage as quickly as possible. Demand, market conditions and—more than anything else—the cost of storage, makes it unprofitable to hold foods in warehouses any longer than absolutely necessary.—*National Provisioner*.

Untaxed Food for the People.

A food problem in Canada! The thing is a scandal. It suggests a damaging comment on the administration of Canadian affairs. Here we have a half-continent favored beyond most countries in the fertility of its soil and the variety of its products. Its population is boastful of its own intelligence and progressiveness. And yet in the very elementary obligation of a civilized community the machinery breaks down; the cost of the essential foodstuffs of the people has doubled and trebled, while wages and salaries have increased but little. That fact is more than a scandal. It is a menace.

At the present moment the average city housewife is helpless. She sees the cost of food for the family increasing at an alarming rate. Within the past year her grocers' prices for butter, eggs, sugar and other necessities have advanced at least 20 per cent over even last year's exorbitant rates. "There are no cheap cuts any more," she says, "and even common farm vegetables and orchard fruit are almost out of the question."

The curse of the situation is the multiplicity and the burdensomeness of the taxations on the food of the people. Every civic restriction and obstruction increasing the difficulty in getting the products of the farm to the homes of the people is a tax on food. Excessive freight rates are a tax. Artificial limitations on sources of supply are a tax. Tariff duties on foodstuffs are a deliberate tax by the Government on the people's food. Why should such taxes be allowed to make life as train in Canada? Why should middlemen be multiplied at the expense of both producer and consumer?—*Toronto Globe*.

The Strange Case of Dr. Wiley.

Dr. Wiley is so much in the limelight, and his office has so much to do with the regulation of soft drinks, extracts, syrups, etc., that we necessarily have devoted considerable space to his picturesque official career and public utterances, particularly during the past two or three months while he was undergoing investigation by a congressional committee and vindication by the president of the United States. While our editorial opinion of the illustrious "doctor" is not as favorable as we could wish, we have tried to "tote fair" with him by reproducing press opinions and news that gave both sides, in order that our readers would not take snap-shot judgment on him from *ex parte* testimony. One thing is very apparent in all these press clippings, viz., the trade press of the nation is almost a unit against Wiley, while the daily newspapers are zealously touting his "pure food" game. As an abstract principle, the latter are right, in so far as "food poisoners" are still endangering human life and health (which they are not); when it comes to the concrete, practical workings of food laws, the trade press is right. Wiley's man of straw deludes one; it does not delude the other.—*Southern Carbonator and Bottler*.

Marvelous, Simply Marvelous.

The extraordinary discovery made by Professor W. H. Lewis and his wife of Johns Hopkins University, whereby cellular substances are caused to grow indefinitely outside of the organisms to which they originally belonged, bids fair, if the claims made for it are fulfilled, to solve the problem of a cheap food supply. It is claimed by the Lewises that they have taken pieces of chicken, placed them in a saline solution and caused the chicken meat to grow. Cutting off pieces of the meat did not interfere with the process of growth, and consequently Professor Lewis states this process can be kept up *ad infinitum*. Moreover, the treatment may be successfully applied to any kind of meat, so that one may grow beef, mutton or venison, turkey or quail, as easily as radishes or onions and at a very trifling cost. The marvel is that the Lewises seem disposed to impart the knowledge of the process which they have discovered to the world at large. By keeping it to themselves and engaging in the business of growing meat by wholesale they might come to command the chief source of the world's meat supply, and thus enjoy the most lucrative monopoly in existence, without running foul of the laws against restraint of trade. For the good of mankind, it is to be hoped that their claims be verified and

that their secret will become common property. The boon thus conferred upon the masses would be of inestimable value.—*Pittsburg Chronicle-Telegraph*.

Population Increases Faster Than Meat Supply.

There is not much hope for a decline in the price of beef, for cattle raising has actually diminished. In 1900 cattle composed 48 per cent of the live stock on the farms, but now they constitute only 30 per cent. All other live stock has increased in number but cattle lags behind. This is making beef the costliest meat a person can buy. A man can invest a dollar in oysters, chicken, mutton, fish, pork, and it will go farther than that amount spent for beef.

The fact is that population is increasing faster than the meat supply. While the population of this country increased 14,000,000 in the decade ending 1910, the decrease in the total number of cattle was 7,000,000 in the same period. So the number of mouths to feed is increasing and the number of pounds of beef to fill them is diminishing. So it will take a long time for the high cost of living to settle down where it once was. The time is not far distant when a beef roast or a sirloin steak will be the greatest delicacy at all aristocratic functions.—*Ohio State Journal*.

Variety of Food Material in This Country.

When the average American or Englishman travels, he is glad to see new cities, new scenery, new costumes, and new faces; but he is comically indignant if he cannot get the same food he has always had at home. It would be much better for him if he could be made to understand that Cowper's maxim, "Variety's the very spice of life," applies to diet as much as to anything. Every country has something to give and teach us regarding the pleasures of the table. No other land yields such a lavish and varied supply of raw material as the United States, and all we need in order to become the leading gastronomic nation is to wake up to the importance of good and varied cooking and rational eating, and to learn all we can from nations famed for their culinary art. The methods of obtaining the diverse national food flavors can often be studied without traveling abroad, since in our cities we have cooks and restaurants of nearly every land under the sun. In New York one can make a gastronomic trip of the world.—*Century Magazine*.

Don't Forget That Butter Fat Contains Butyric.

In spite of the fact that numerous tests have shown that oleomargarine is not as wholesome as butter, there is still a prevailing impression that no difference exists in respect to this characteristic. In this connection it should be borne in mind that one thing that makes butter so very digestible and wholesome is its high content of volatile or soluble fats, notably butyric. Butter contains a vastly greater proportion of these fats than oleomargarine; indeed one thing that distinguishes butter fat from all other fats is the presence of butyric. Oleo being made up almost exclusively from fats other than butter fat, it is only reasonable to expect it to be less digestible and wholesome than butter.—*Butter, Cheese and Egg Journal*.

Country Benefits From Secretary Wilson's Work.

Let us glance at what has been accomplished by some of the departments, and as agriculture underlies and precedes all other interests we will begin with that. Needless to say the veteran farmer, who has long presided there, has been steadily on the job and has been carrying the work forward in all directions. It is literally true that there is not a branch of farming, horticulture, stock and poultry raising, to say nothing of good roads, that has not been greatly benefited by his activities of late, the most prominent and beneficial being in the direction of how products greater in quantity and higher in quality can be secured at little increase of expense. This touches the welfare of the whole country and is essential to the continuance of its growth and the permanence of its prosperity.—*Cincinnati Enquirer*.

High Cost of Living a Century Ago.

That the cost of living is high and apparently getting higher few will deny, but it is not unprecedented. The diary of a Connecticut clockmaker who lived in the early part of the past century has been unearthed in which he had set down some of the prices for the necessities of life in 1815, the year he was married and began housekeeping. Flour was \$13 a barrel, molasses 75 cents a gallon, brown sugar 34 cents a pound and pork \$13 a hundredweight, while cotton shirting was a dollar a yard. Taking those figures as a standard, three years hence we may be able to show that prices are lower than they were a century ago.—*Boston Transcript*.

CULTURED OR FERMENTED MILK.

There is a rapidly increasing interest in cultured or fermented milk throughout the country and, as we have previously stated, the subject is worthy of investigation by all creameries, says the *Butter, Cheese and Egg Journal*.

It was Dr. Metchnikoff of the Pasteur Institute who first proclaimed the virtues of this class of milk, especially that soured with the *Bacillus Bulgaricus*. The Bulgarian and other lactic acid bacteria are antagonistic to putrefactive organisms and, by virtue of this, when taken into the system, will check putrefaction in the intestines and colon and thus prevent the formation of toxic substances which give rise to a retinue of intestinal and bodily disorders.

Nothing ever rested upon a sounder basis than the claims made for cultured or fermented milk. All butter-makers, and cheesemakers especially, who have had experience with good starters can testify to the antagonism of lactic acid bacteria toward other classes, and especially the putrefactive kind.

That a multitude of ills follows from excessive bacterial fermentation in the intestines is a matter of common knowledge. Why then should good results be expected by daily inoculating the digestive tract with organisms which are antagonistic to the kinds capable of creating disorders and, in some cases, even causing death?

The term *Bacillus Bulgaricus* is the name applied to a species of lactic acid bacteria indigenous to Bulgaria, where Dr. Metchnikoff found people to live to an unusually old age. Investigation proved to him that the regular indulgence in a drink (Yogart) containing this bacillus was largely responsible for the longevity of Bulgarians. This species produces about twice as much lactic acid as the species used by butter and cheesemakers for starter purposes.

So far as we know, none of those who are making a specialty of supplying cultured milk have found the *Bacillus Bulgaricus* entirely satisfactory when used by itself. The high acid production and the comparatively high temperature at which it must be grown, combined with the tendency to produce a slimy curd, make milk fermented with this bacillus less palatable than that soured with ordinary lactic acid bacteria. It is for this reason that many who are making a specialty of cultured or fermented milk now use a combination of the ordinary lactic acid and the Bulgarian bacteria and some use the common lactic acid bacteria exclusively.

BAKING POWDER LABELING DECISION.

Food Commissioner A. H. Jones of Illinois has, after giving thorough consideration to the question of the proper labeling of baking powders, ruled that the aluminium powders may be labeled optionally, "Sodium aluminium sulphate," "Soda alum" or "Alum." This decision is in line with the decision in the case in Pennsylvania of the Commonwealth vs. Myer Gross by Judge Smith.

The Federal court in Memphis, Tenn., last month, in a case wherein a baking powder labeled "Sodium Aluminium Sulphate" was declared to be correctly labeled under the law, ruled in harmony with the conclusions reached by the Food Commissioners of the following states: Alabama, Idaho, Massachusetts, North Carolina, Oregon, Pennsylvania, Vermont, Virginia, Washington, and Illinois.

The contention made by the baking powder manufacturers using sodium aluminium sulphate that the substance they were using was not "Alum" and that really it was false labeling to put the word "Alum" on the can, is therefore sustained and the conclusion on this point has for many years been accepted by the United States Government. Some states, however, still insist upon the use of the word "Alum," although the facts are at variance with the law in these states.

As the record stands today it shows thirty-nine states and territories allowing the wording "Sodium aluminium sulphate" and fourteen still adhering to the old idea.

FOOD FROM CRUDE PETROLEUM.

A newspaper yarn from Pittsburgh is to the effect that a new source of food supply has been discovered through the industrial development commission by scientists of the University of Pittsburgh, who have \$100,000 at their command to develop the findings. The commodity under scrutiny of the savants is crude petroleum and, while secretive as to the details, Dr. R. K. Duncan, the discoverer, explains that it has been found the hydrocarbons of petroleum are amenable to transformation into fatty acids, which, blended with glycerin, form a new food.

The Remsen Board and Dr. Wiley

The following letter was written by Dr. Graham Lusk, Professor of Physiology in the Medical Department of Cornell University and an eminent authority on dietetics, to the *Medical Record* of New York. It was published on December 9, 1911.

The public has been so thoroughly hoodwinked regarding the scientific work of Dr. Wiley that it seems necessary that some one who understands the truth of the matter should speak.

A few years ago Dr. Wiley established a poison squad. A number of young men were given benzoate of soda with their food, and it was found that they became ill. The maximal amount received by any individual in this series of experiments was 41 grams (about 1½ ounces) distributed in small doses through a period of twenty days. As the result of these experiments, Dr. Wiley has never ceased to insist that benzoate of soda is a poison. Reiteration of this statement has made people believe that the statement itself is true.

The work of the scientist is usually accomplished in the quiet of his laboratory without flourish of trumpets, without newspaper notoriety. An earnest endeavor to separate scientific truth from the influence of psychic turmoil must be the aim of the scientific man. Dr. Wiley's experiments on the contrary were trumpeted abroad. The young men who were the victims must have been more than human not to have been influenced mentally by this course of their chief. They had a fever, many of them, and Dr. Wiley was so alarmed that he discontinued the experiments. Authorities have, however, suggested that the febrile symptoms noticed in this group of men were in reality those of an epidemic of the grippe. It appeared to many that the experiments were not entirely satisfactory, especially after it was learned through an investigation held in Washington that the majority of the individuals employed in the experiment had been used as subjects in previous experiments in which they had been made ill as a result of their ingestion of various deleterious substances. Some of them testified that they fully expected to be made ill by benzoate of soda. Furthermore, the benzoate was administered in capsules and not in diffused state as it would have been had it been taken in preserved food.

It did not seem to be right that the judgment of a single man should be accepted as final scientific truth, especially when the course of experimental procedure employed by that individual was open to criticism. In recognition of this fact the Remsen board was appointed by the Government. It has been freely stated that it would be very much cheaper for the government to abolish the Remsen board and to place the judgment with regard to all such matters in the hands of Dr. Wiley solely. The proposition appears to be that doctrines taught by one man should be accepted as the truth by 90,000,000 people. If the popular state of mind be such, that personal idolatry of Dr. Wiley is to crown him with the added tribute of infallibility, one must go back to the middle ages to find in the worship of the authority of Galen a similar parallel. It will be remembered that Galen, who was born at Troy and who died at Rome in the year 200 A. D., taught medical doctrines, disbelief in which was held to be heresy by the medieval church.

Dr. Wiley and the newspapers unite together in proclaiming that the work of Dr. Wiley is hampered by the Remsen board. Who are the men who are hampering Dr. Wiley? President Remsen of the Johns Hopkins University is the chairman of the Remsen board. Remsen received his education in Germany. It was he who discovered saccharin which was placed upon the market by a German firm, it having been patented without his permission, the profits going to the German patentee. In my student days in Germany a translation of Remsen's book on organic chemistry was largely sold to German students. He is a man of undoubted integrity and high culture.

Professor Chittenden, Dean of the Sheffield Scientific School, is one of the few Americans who have developed a school of trained pupils. One speaks of the school of Liebig, meaning the men whom Liebig trained. One speaks of the men of the Chittenden School, meaning the physiological chemists who, throughout the country, hold important chairs of physiological chemistry and of physiology, as members of the Chittenden school. He is a man of great power and great capacity.

The late Dr. Christian A. Herter was a man of high ideals, a man who endowed lectureships at the Johns Hopkins and

at the University of Bellevue Hospital Medical School, a man who was acquainted with the great scientists of the world. Dr. Herter's private laboratory was carried on at his own expense. One of his chief assistants was Dr. Dakin, an Englishman whom the English considered the best chemist they had in their country.

Professor Long is a man of experience and long service, who has done much work for the United States government in the examination of food and drugs for the Indian Service. Associated with him in the work of the Remsen board was Dr. Stanley R. Benedict, one of my colleagues at Cornell.

One of my own assistants, Dr. A. I. Ringer, was in the laboratory of Dr. Herter, and for his careful accuracy I can vouch. These men are men whom I know personally, whose integrity I am sure of, whose work I can rely upon, and these men, after many months of hard labor, came to the conclusion that Dr. Wiley's results were absolutely wrong. Investigations were carried on in three laboratories. In Dr. Herter's in New York City, in Dr. Chittenden's in New Haven, and in Professor Long's in Chicago. It was thought best that all of the experiments should be as independent as possible, so that the truth should be arrived at without bias. On account of Dr. Wiley's belief that benzoate of soda was a poison, it was at first given only in small doses. Dr. Herter, however, learned that Lewinsky, a pupil in the clinic of the great Minkowski, had given nearly two ounces (50 grams) of benzoate of soda to a man in one dose without injuring him. Dr. Herter increased the dose which he gave. Dr. Ringer, for example, took a fifth of an ounce of benzoate of soda (6 grams) without the slightest change in his condition, which could be interpreted as being detrimental. He, with the other men employed, took, through a period of three or four months, dietaries containing from 0.3 to 6 grams of benzoate of soda daily.

Here then were three individual laboratories working under the care of great and experienced men, all arriving at the same result, and all of them deciding that Dr. Wiley's experiments were wrong. These men were the ones to whom the country particularly could look to decide this question, and Dr. Wiley has stated that he has a very slight opinion of their scientific worth. It seems to those who are really in a position to know the truth about the matter that there has been no controversy in this country where the general public has been more completely and absolutely misled as in this question of the relative reliability of Dr. Wiley's statement on the one side and the statement of the Remsen board on the other. Every newspaper from one end of the land to the other is, apparently, willing to place complete control of the regulation of the preservation of food in the hands of a man whose experimental work has been shown to be erroneous.

Certain experiments made by Dr. Lucas have been widely quoted. Dr. Lucas was one of the subjects in Dr. Herter's laboratory. During his stay in this laboratory information was given to the newspapers which was traced to a conversation of Dr. Lucas. In consequence of this, Dr. Lucas received a severe reprimand from Dr. Herter. Passing from Dr. Herter's laboratory, he went to another, from which he published an article in direct antagonism to the findings of the Remsen board. Dr. Herter, criticising this work of Lucas, stated "Dr. D. R. Lucas has published certain statements in regard to the action of benzoate of soda which are so much at variance with the facts as to call for criticism and correction. I deem it my duty to make at least some comment, despite the fact that this work is highly distasteful to me." Dr. Herter, after reviewing the work of Dr. Lucas, stated that "if it were worth while to cite further examples of untrue statements with which this paper abounds it would be an easy undertaking." The newspaper press which quotes the article of Lucas does not measure the relative personal equation which distinguishes Dr. Lucas from the scientific men whose pupil he was in the Herter laboratory. These experiments of Lucas are the only ones ever reported as confirming Dr. Wiley.

The quantity of benzoate of soda which the law permitted to be used as preservative in three-quarters of a pound of beef was 0.3 of a gram. The subjects experimented on by the Remsen board received twenty times this quantity or one-fifth of an ounce without affecting their health. As above stated, nearly two ounces have been given to a man without injuring him. However, there must be a limit to the dose which can be given. In the laboratory of the writer Dr.

Ringer has found that more than an ounce of benzoate of soda may be given to a goat weighing eighty pounds without any disturbing symptoms other than a loss of appetite. Two ounces given in one dose to this same goat killed the animal. This, however, does not conflict with the statement that in small doses benzoate of soda is absolutely innocuous.

As regards the normal action of benzoate of soda, the following facts may be of interest. In the bodies of all animals there is a constant production of a substance called glycocholic acid. This substance is not a poison, but a normal product of the living tissues. When natural foods containing substances which are convertible into benzoic acid are taken by an animal the benzoic acid unites with glycocholic acid to form hippuric acid. Hippuric acid is not a poisonous substance.* It is eliminated by the kidneys and is found in the urine. Grass and hay contain substances which form benzoic acid in large quantities, and so there is a large formation of hippuric acid in horses, cattle, goats, rabbits and all herbivorous animals. The same process takes place in man. If huckleberries or cranberries or other related fruits be eaten benzoic acid arises from them in such quantity that the amount of hippuric acid formed may be very considerable. In the same way, when benzoate of soda is given to man with his food it forms benzoic acid, which unites with glycocholic acid to form hippuric acid, and this passes out in the urine. This capacity does not have to be acquired. It is always present, even in infants. There is nothing mysterious about this. It is based on well-known physiological functions. The organism is adapted to render harmless benzoic acid administered to it in small quantities.

The argument here presented is in no way intended to dispute the decision of the Prussian Deputation for Medical Affairs that to allow the use of benzoate of soda in the preservation of food would enable the manufacturer to practice methods less cleanly than he should.

And finally let the reader consider for a moment the following illuminating testimony given by Mr. McCabe (Committee on Expenditures in the Department of Agriculture, August 7, 1911, p. 511): "There was a correspondent here in Washington almost from the time that the board was created who sent out any number of copies of articles reproduced by a typewritten process abusing the Secretary, abusing the referee board, impugning the motives of the Secretary for creating the board, attacking the personnel of the referee board; and those articles have continued to be sent out up to within certainly a very few days."

This letter has been written for the public statement of the truth regarding the relations of benzoate of soda to health. It has seemed a public duty which ought not to be evaded.

*Wiley, with a reckless disregard for well-established fact, told Congress (the Committee on Interstate and Foreign Commerce, February 26, 1906, p. 245), the following: "If the kidneys should cease to act for twenty-four hours there is not a man on this committee who would not be at death's door from hippuric acid and the urea which would be in the blood. Hippuric acid is perhaps far more poisonous than urea. It is a deadly poison."

IOWA BUTTERMILKERS' CONVENTION.

The most successful and interesting creamery buttermilkers' convention ever held in Iowa adjourned January 26, after a three days' session wholly devoted to discussion of problems that confront the creamerymen and buttermilkers of the state. A buttermilkers' scoring contest was held, testing the ability of a number of buttermilkers to score a dozen tubs of butter upon which the official score had been placed, first honors in this test going to H. C. Stendel, Northwood, Iowa.

The association unanimously adopted the plan advocated by Prof. M. Mortenson of holding scoring contests during the year, one exhibit to be held each month. Seven of these competitive exhibits will be held at Ames, under the direction of Prof. Mortenson and the dairy school, others to be held at Des Moines and Mason City in connection with the annual fairs, and the last to be held at the time of the next buttermilkers' convention.

There was very considerable interest shown in the discussion of the new Iowa law which requires every operator of the Babcock test to undergo an examination as to his fitness for such work, and to pay an annual license fee of \$2.50, and no little opposition developed to this plan. Dairy and Food Commissioner Barney explained that about 2,500 such licenses had been issued, of which number only 500 were held by creamery buttermilkers, and that three-fourths of these had been paid for by the creamery managements instead of by the buttermilkers; that he had refused about 500 applicants; that he had already revoked several licenses because of over-testing by the holders of the licenses. He pointed out, what had not been understood by the members of the convention, that under the old law it was almost impossible to convict an operator of the test if he overtested, but that under the pres-

ent system he was clothed with arbitrary authority to revoke the license of any one who manipulated the test in any improper fashion, and predicted that great results in the way of controlling testing would accrue. He also called attention to the fact that the previous convention of the buttermilkers had endorsed the present law when it was pending in the legislature, and to the fact that there was no way to modify it for more than a year, by which time he believed that the results obtained would be so plain that no one would want the legislature to repeal the statute.

The convention by resolution urged the National Creamery Buttermilkers' Association to employ a secretary to devote his whole time to work connected with the association and the general welfare of the creameries and buttermilkers of its membership. County and other local organizations were urged for the purpose especially to improve the quality of raw material. Other resolutions announce support of a fat standard for butter instead of a water standard, and opposition to any oilomargarine legislation that will eliminate the color line discrimination between butter and oilomargarine.

The new officers are C. N. Hart, of Plymouth, President; L. P. Anderson, Algona, Vice-President; J. J. Brunner, Strawberry Point, Secretary, and G. O. Miller, Arlington, Treasurer. Mr. Brunner is manager of the largest whole milk creamery west of Chicago and received the highest score for butter exhibited at the Convention. This association is known as the Iowa Buttermilkers' Association and none but active buttermilkers are eligible to full membership.

HOME TESTS FOR FRESH EGGS.

The insistent demand of the consuming public that they be protected in the purchase of eggs has led Commissioner Barney of Iowa to issue a bulletin giving a number of tests for freshness that can be applied, as follows:

"One of the greatest problems confronting the enforcement of the pure food laws is in regard to eggs and its importance is hardly second to any other class of foods. We have numerous complaints where eggs are represented and sold as strictly fresh eggs when in fact they have been kept in cold storage for a considerable length of time. There are two sections of the food law which may be applied to a question of this kind: First, if the eggs are wholesome and simply misrepresented as to age it would be a case of misbranding under the following section: 'If it be labeled or branded so as to deceive or mislead the purchaser.' Second, in case the eggs are unwholesome or bad, they would be adulterated under the following section: 'If it consists of the whole or in part of a filthy, decomposed or putrid animal substance.' In the latter event the adulteration is readily ascertained and if proper evidence can be secured as to the sale of the eggs no trouble is experienced in the enforcement of the law, but in the case of packed eggs being sold as eggs or strictly fresh eggs, the problem is a perplexing one.

"It has been thought best to give some tests which may be performed in the home whereby the consumer may judge the quality of the eggs bought. The most common test is known as egg candling.

"A candler can be made in the home in a very simple manner. Take a quart tin can or measure; a convenient size which I have found is a two-pound coffee can. Discard the lid, turn the can upside down and with the edge of a silver dollar and a pencil draw a circle in the center of the bottom of the can, then with the aid of a can opener or knife cut a hole the exact size of the circle. The average egg measures about one and five-eighths inches at its smallest diameter. The hole will be a little over one and one-half inches in diameter, which will prevent an ordinary sized egg from passing through. With this tin can and a source of bright light, such as an electric light bulb or lamp, it is all the apparatus required. Place the egg to be examined inside the can over the hole, keeping the face as close to the can as possible and shutting out all side light by the aid of the two hands. In looking at the light a fresh egg will have a clear, golden-yellow appearance without any dark specks or spots. As the eggs become older they will give a mottled appearance varying from a slight cloudiness to black spots, depending upon the age. A rotten egg is generally so dark you are unable to see any light through it. With a little experience and good judgment a person can very satisfactorily judge the quality of an egg by this test.

"Another test is known as the salt solution test. Perfectly fresh eggs will just sink in a 10 per cent salt solution at 70 degrees Fahrenheit. This test is quickly applied and will distinguish the fresh egg from one that is even a few days old. There are some instances where a fresh egg will not sink under these circumstances, but such cases are not numerous enough to be of any importance. This test should not be applied to eggs which are intended for storage, as it probably impairs the keeping qualities."

IDAHO COMMISSION WILL HAVE ENLARGED QUARTERS.

More room than was contemplated in the original plans for the interior of the new capitol building at Boise, Idaho, is to be given over to the State Dairy and Food Inspection Department and the State Chemist. The capitol commission has decided to convert one of the passages leading toward the new wings of the building into rooms for the department, and the officials are looking forward to the time when they will have quarters commodious enough so that they can do more work along certain lines than is possible at the present time.

Bacteriological laboratories are to be provided for the health officers and chemical laboratories for the state chemist. As far as possible it is planned to equip these laboratories with apparatus which will enable the officials to make investigations along lines now closed to them by lack of facilities.

Sample rooms are to be provided in which the food inspectors may store the samples of foods that they may collect from time to time in their work of prosecuting the sellers of dirty victuals. The officers state that it is often necessary to store such samples for long periods of time, and that some sort of filing system for them is a necessity.

A room is also to be provided in which to keep standards of weights and measures. The department has a considerable amount of apparatus procured from the Bureau of Standards in Washington which it has so far been unable to use because there was not room in which to set up the apparatus. It is planned when the new building is completed to put this apparatus into use.

James H. Wallis, the State Dairy, Food and Sanitary Inspector, is planning to make an exhaustive series of analyses of the waters of the state, and with the new laboratory he expects to have he believes he will be able to make the experiments and thereby secure some valuable data.

SACCHARIN IN EUROPEAN COUNTRIES.

"A Sugar User," writing to the *New York Journal of Commerce*, says:

"I note by the public prints that Germany and Austria are both taking steps to remove the legal ban existing in those countries against saccharin, and the reason assigned is the high cost of sugar. If saccharin is safe for Germans and Austrians to use, why not for Americans? In Europe the prohibition against saccharin was to favor the beet sugar interests and to protect a Government monopoly of cane sugar importations. No such reasons exist in this country. Sugar is controlled in the United States by a great combination or trust, and an increased sale of sugar benefits only the members thereof to the detriment of the masses.

"Prior to the present discussion of saccharin the annual production in this country was about 200,000 pounds, selling at \$1.50 pound. As it is 500 times sweeter than sugar, to supply the place of the 200,000 pounds of saccharin there will be required 100,000,000 pounds of sugar, with a difference in cost between \$300,000 and \$8,000,000, to be paid by the consuming public.

"The recent exhaustive report of the Referee Board of Consulting Scientific Experts upon saccharin certifies that its use within well defined limits 'is not injurious to the health of normal adults.'

"Why, then, does the board of three secretaries, Messrs. Wilson, MacVeagh and Nagle, charged by law with the duty, hesitate to permit such reasonable and safe use of this cheap substitute for sugar by which the people of the United States may reduce the now exorbitant cost of living by more than \$7,500,000 annually?"

TEA BOARD FOR 1912 NAMED.

Secretary of the Treasury MacVeagh appointed the tea board for the present calendar year, consisting of the following members: R. C. Morrison of Chicago, C. H. Pegg of Toledo, H. Perry of New York, C. B. Platt of San Francisco, George S. Norton of Boston, Alexander M. Scott of Pittsburgh, and George F. Mitchell of Washington, D. C., on February 12.

The personnel of the board is entirely new. None of the members of the tea board of last year was renamed. The new board will hold a meeting probably in New York within the next few weeks.

Secretary MacVeagh departed from the former policy of the department in his appointments. The members are tea experts of jobbing houses instead of importers. In addition, the federal government is represented on the board by George F. Mitchell, who is a tea expert of the department of agriculture. The government was not represented on the former board.

LAST YEAR'S WORK OF MINNESOTA COMMISSION.

Following is a summary of the work accomplished by State Dairy and Food Commissioner Joel G. Winkjer of Minnesota and his assistants, for the year 1911, as given in his official report to Governor Eberhart:

Inaugurated dairy barn inspection, with four inspectors working under plans of the federal department of agriculture. Prosecuted suit against the American Linseed Oil Company successfully for sale of adulterated linseed oil. Instituted proceedings to prevent the sale of oleomargarine colored like butter. Instituted proceedings to prevent discrimination in the purchase by centralizing creameries of milk and cream, which case now is in the state supreme court. Enlarged work of cannery inspection and conducted a competitive exhibition. Output increased 100 per cent over 1910. Enlarged creamery inspection, adding farm barn inspector to service and conducted competitive contests for buttermakers. Collaborated with state public library commission in preparing traveling library for dairymen. Assisted in organizing fifty-seven new co-operative creameries. Earned part of the credit of winning national and international banners and numbers of cups and trophies for Minnesota butter. Improved cheese factory inspection.

Minnesota this year made Swiss cheese scoring as high as the imported and cream cheese which sold for a record price. Established experimental creamery at Albert Lea. Issued numerous bulletins and circular letters relating to dairying, buttermaking and cheesemaking.

WILLIAM R. JACKSON.

William R. Jackson, Deputy Food, Dairy and Drug Commissioner of Nebraska, died last month at his home in Lincoln, after a lingering illness.

Mr. Jackson was born in a log house near Marengo, Ill., in 1860. He received his education in the rural schools, in the Marengo high school and in the Evansville seminary. After graduating from the latter institution he served on the faculty of the school for two years. During this time he was married to Miss Thompson. He received his A. B. degree from the University of Nebraska in 1902 and his A. M. degree in 1904.

He went to Nebraska in 1888, engaging in school work for six years. He was then elected county superintendent of schools of Holt county and two years later was elected State Superintendent, being the only Democrat to ever hold that position in that state. He was re-elected in 1898. Since that time he has been connected with the State University and Wesleyan University. Governor Holcomb appointed him a member of the State Board of Education in 1895. At the 1910 election he was the Democratic candidate for State Superintendent, being defeated by James W. Crabtree. One of Governor Aldrich's first acts upon assuming office was to appoint Mr. Jackson Deputy Food Commissioner, although he was not a candidate for that office.

NATIONAL CANNERS' CONVENTION.

The convention of the National Canners' Association, in conjunction with the Machinery and Supplies Association and the Dried Fruit and Canned Goods Brokers' Association, was in session in Rochester, New York, from February 5th to 9th. Many interesting addresses were heard, while the business sessions of the convention were given over to the discussion of the commercial features of the canned goods trade. Provisions for the continuation of the publicity work of the association were made, and the question of discounts to wholesalers and jobbers was referred to a committee to decide before the coming season's pack is made.

A resolution in favor of the proposed department of health, a measure before the present Congress but practically dead, was passed.

The following officers were elected the last day of the convention: President, Samuel S. Hascrot, Cleveland; Vice-President, Hugh S. Orem, Baltimore; Secretary-Treasurer, Frank E. Gorrell, Bel Air, Maryland. Mr. Gorrell was elected for the sixth time as Secretary and Treasurer. A Board of Managers of thirty-four members was elected and fifteen of these will be appointed by the president to act as the Board of Directors.

WOULD EXEMPT FOODS FROM DUTY.

The high cost of living was made the basis for a bill introduced in Congress January 18th by Representative Sabath, of Illinois, which would exempt duty on foods, including rice, rye, milk, sugars, wheat, barley, potatoes, butter, eggs, cattle, sheep, all smoked and fresh meats, tallow and poultry. The bill was referred to the Ways and Means Committee.

FORMIC ACID FOUND IN FRUIT JUICES IN INDIANA.

The Indiana State Board of Health, through the food and drug laboratory, is now in the midst of an examination of fountain fruits and other preserved fruits to ascertain whether the manufacturers are using formic acid in their manufacture, but thus far have been able to determine whether the acid found has been placed there by the manufacturers, or comes from the natural fruit. The examination is in immediate charge of W. D. McAbee, formerly chemist for the Indianapolis Board of Health.

Some two or three dozen samples of fruits used in fountains, or in confections and in fruits in barrooms, have been examined. McAbee has found authority for the assertions that formic acid has been found in natural state as high as one-tenth of one per cent, and in his examinations has found the formic acid content as high as one-fourth of one per cent. He has not, however, determined whether the content has been added in the manufacture or has come naturally.

Formic acid reaction was found in virtually all the fountain fruits examined, but the chemist is unable to say at this time whether it has been added. Dr. J. N. Hurty, Secretary of the State Board, said a year ago that the manufacturers were using a new preservative, imported from Germany, which it would be virtually impossible for the food chemist to ascertain and prove was being introduced into the food-stuffs, but he said at the time his information was so meagre he was not in position to make any definite statement concerning it.

Information in the office of the State Food and Drug Commission is held not to be final as to whether the acid is detrimental to health, although an opinion from an official board of Prussia is to the effect that it is harmless. Whether the food manufacturers have a right to use formic acid as a preservative, if they are using it, under the provision of the Indiana law, is a question. Whether it will come under the same category as benzoate of soda, which the state board has placed under a ban, remains to be seen.

One result of the experiments of McAbee is interesting. He obtained a formaldehyde reaction in a test of distilled water. This has been held for some time to be theoretically possible, but the department said it had no record of any laboratory result showing similar to that obtained here. McAbee said it might have been due to some possible uncleanness on the part of the container for the distilled water, although that was carefully guarded against. He is not in position at this time, he said, to make any definite statement concerning the matter.

The prosecutions by the department for January were sixteen in number. With two exceptions, all were for violation of the sanitary clause of the food and drug act. One was for selling bad eggs. There were no prosecutions for adulteration and no cases of adulteration reported.

The department has taken official notice of a group of manufacturers advertising to sell machines for mixing butter and milk with a view of increasing the butter bulk. It is said hundreds of the machines have been sold in the state, but the department has not yet discovered any instances of butter so treated being sold on the market. Most of the stuff is used in the home. Prosecutions are promised in the event such stuff is placed on the market as butter.

WORK OF WASHINGTON COMMISSION.

The several divisions of the Dairy and Food Department of the State of Washington have been especially busy during and since the holidays. In the drug work, many samples have been taken and a thorough inspection of all stores in the state with a view of cleaning up the stocks on hand. As a result a great deal of stuff, on which tests had been had, was destroyed, the druggists surrendering the products to the Drug Inspector rather than going into court under condemnation proceedings. One of the arrests and convictions reported recently by the Dairy and Food Commissioner is that of Peter Fisher of Port Angeles, chairman of the Food and Drug Committee of the lower house during the last session of the state legislature.

Much activity is also reported in the food work. Scores of samples have been taken and special work is being done at present on lemon extracts and vinegars. It is said that the vinegar tests are not showing up well and there is likely to be some extensive seizures in the near future. In the extract work, two arrests have been made at Everett, and the product of some eight or ten foreign extract manufacturers has been ordered from the shelves. One arrest has been made at Leavenworth on a charge of using "Freeze'm" in chopped meats and three arrests made at North Yakima.

one for adulterated lard, one for misbranding of eggs and the third for adulterating cheese. E. C. Poole of Lind, after going to the Supreme Court once, was again recently convicted of selling a veal calf that had died on the way to market. Poole has again appealed. Twelve hogs, dressed for the market, were seized at Quincy and destroyed. It is said they bore evidences of being affected with hog cholera. Six beef carcasses are now under seizure in the Pacific Cold Storage company's warehouses at Tacoma and the meat is being tested, both for a preservative and for bacteria. In conjunction with this inspection work the department has adopted the plan of removing from the shelves all the old and shelf worn goods.

The Washington Dairy and Food Department carries on the dairy work as largely as possible from an educational standpoint. Yet the inspection and scoring of dairies and testing of milk is not overlooked. Three arrests were recently made in Everett and convictions obtained, one in Spokane and two in Tacoma, and convictions secured in all cases. Six arrests were made in Tacoma but have not yet been tried. All these complaints are for watered and skimmed milk. Market inspection is kept up guarding against renovated butter and oleomargarine violations. Evening meetings have been held almost continually now for a month in the small country halls where the dairyman is not otherwise reached and great interest has been shown. A stereopticon outfit is owned by the department and illustrated talks are given on dairy and other topics.

Washington also has an agricultural seed law under the Dairy and Food Department with an expert in charge. A complete laboratory has been furnished and is maintained and hundreds of samples are being taken and tested. A car load of alfalfa was found at Walla Walla recently and returned to the Portland, Oregon, dealer who in turn had secured it from Utah. This week a car load of alfalfa and clover seed and a car load of clover was seized at Spokane, found to be adulterated and returned to the Boise, Idaho, shippers. Two of the large seed firms of the coast have installed complete seed testing laboratories as a result of the activity of the department in enforcing this law.

MEAT REGULATIONS OF SWITZERLAND.

New regulations were passed in November last by the Swiss Federal Council to facilitate the importation of frozen meats from the Americas as follows:

The meats must be transported to the Swiss frontier in appropriate refrigerating cars, as prescribed by the frontier veterinarians. Cars will not be detained at the frontier, but will be inspected by the customs authorities upon arrival at their destination. In case no customs officer is located at that point the importer shall notify the customs department of the arrival of the shipment. An officer will then be sent to make the inspection, the expenses thereby incurred to be paid by the importer.

These new regulations will especially benefit the meat exporters of Argentina, who have special facilities in the way of cold storage ships for the transportation of their products.

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Enforcement of State Food Laws

II. The Adulteration of Candy

By H. R. Wright, Former Dairy and Food Commissioner of Iowa.

In the February issue of the AMERICAN FOOD JOURNAL a table was given showing all the detected and prosecuted violations of law in seventeen states and a discussion of the use of chemicals in foods was given, which points out very clearly that these chemicals are not at all prevalent, that they are confined nearly altogether to the use of benzoate of soda in catsups, to the use of saccharin, to the use of sulphites in hamburger steaks. It was pointed out that chemicals are not used in milk nor in other foods likely to be sold to small children or fed to infants. It would be a lusty infant that would survive a diet of pickles, and ice cream cones and marshmallows and mince-meat and cider and other soft drinks. But that's the line of food he would have to take in order to get *any* chemicals, as shown by the reports tabulated.

But most every child, some of them pretty small, is a constant consumer of candy. If candy is mighty bad, perhaps the story of a quarter of million deaths of children annually, by reason of adulterated foods, is not so much of a lie after all. If glue and varnish and poisonous colors and flavors and harmful coatings and mineral fillers are found in all or a large part of our candies, we ought to do something about it and do it quick. Let's see what the facts are as set forth in the official reports of the principal food commissioners of the United States.

No one article of food has been so persistently maligned and so much misrepresented as confectionery. So universal has the story of grossly adulterated candy become that even some of our food commissioners, who ought to know the facts if anybody does, have not been free from the practice of condemning candy. Of course, yellow newspapers and magazines

have to tell lurid tales of vile and poisonous candies. They could not exist upon a plain statement of facts about candy, because the facts are not lurid at all. It ought to be noted also that candy is the favorite with those who really wish to poison an enemy, and every year in nearly every state the papers are full of the story of the disappointed lover who sends his rival a box of candy, which, upon analysis, is found to be filled with arsenic or strychnine or prussic acid. That's not the fault of the candy, nor of its maker, but nevertheless candy does come into bad repute by reason of such unusual circumstances. One would think to read the imaginative tales that are put up, not for the information of the public, but to sell to them, that candy is widely adulterated with products, not, perhaps, so well known as arsenic and strychnine, but still quite as harmful.

We are frequently horrified by a story of the untimely and unexplained death of a child, and the statement frequently follows that such regrettable death was caused by eating candy. Now the only connection apparent between the eating of the candy and the death of the child is that the child died *after* eating the candy. The sequence is quite evidently one of time rather than one of cause and effect. One might as well say that the child died some time after awaking from a sound sleep, which would undoubtedly be true, and then argue that sleeping is dangerous to the lives of our children. Every child eats candy. Some of them unfortunately die after eating candy, just as some of them die after drinking milk or eating bread and butter or ice cream or peanuts. Physicians and other skillful persons must carry on the discussion of the effects of the sugar and the corn syrup of which

the candy is composed. They may be bad for aught I know, but there is no authentic record anywhere, certainly not in any food commissioner's report, that any child ever suffered sickness or death by reason of any adulterations in candy.

For a good many years the National Confectioners' Association has offered a reward for authentic information of the injury or death of any person due to the eating of candy. Their officers have investigated every alleged case and have in every case discovered that the rumor was without foundation in fact and was wholly due to some local reporter of the Munchausen variety. Incidentally it may be stated that this association, long before the present national food law or most of the present state food laws, secured the enactment in nearly all the states of the Union of the candy law, prohibiting the manufacture or sale of candies containing poisonous colors or flavors, or terra alba, barytes or other mineral substance.

You have seen those brightly colored representations of pieces of cloth colored by means of dyes taken from food products, especially from candies. You have been led to assume that your interior was painted a similar spectacular shade and you easily imagined dire and dreadful effects. You have not at the same time been informed that seven of the coal tar colors are expressly permitted by a ruling of the United States Board of Food and Drug Inspection, nor are you told that the color is mighty strong as a color and not at all powerful in any other fashion.

Coal tar colors have been used for a good many years in this country in food products. Every food product that is colored at all is or has been colored with coal tar colors. But great prejudices have arisen in regard to the use of these dyes, for the reason that allied products made from coal tar products have been found to have extraordinary medicinal effects, and for the further reason that in the manufacture of these dyes, the elimination of harmful associated products has been very difficult and expensive. There is reason to believe that in some case they were not eliminated and that the commercial color carried with itself some of the harmful associates. Then, too, some of the coal tar colors (and we believe there are hundreds of kinds of coal tar colors) are certainly known to be harmful, while others are known to be harmless, and still others are in the doubtful column. It therefore comes about that two states have laws wholly forbidding the use of coal tar colors in food products. But the Board of Food and Drug Inspection has made up a list of seven permitted colors, and has insisted upon a certification of the kind of color and the way it is made, after inspection by the chemists of this board. Of course the law gives them no such authority to prescribe the methods of manufacture, but the doubt cast upon coal tar colors as a class, perhaps warrants them in stretching their authority to insure the use of only those shades known to be harmless and to require proper methods of manufacture so that the possible harmful associated products shall be surely eliminated. Whatever the prejudice that may have arisen from the careless practices of unskillful color makers in the past, it is certainly now true that the seven permitted colors have almost universally come into use, and that the method of manufacture required is so expensive and so difficult that only the highest class color makers have been able to stay in the business and their food colors are the best that have ever been put upon the market in the history of the food business, and as cer-

tainly free from harmful effects and as innocent in their action as the foods in which they are placed.

Nevertheless, this fact does not excuse the Food Commissioner of Minnesota, for example, from enforcing the provisions of the law of that state which distinctly prohibit the use of coal tar color in any food product. Consequently numerous prosecutions have been made upon candy, adulterated candy, if you please; that is candy that contains coal tar dye of some kind. Out of 270 detected violations of law relating to candy, 159 were prosecuted, and of these prosecutions all were for the sale of candy that was listed as "illegal" or "colored with coal tar dye," with one exception. The exception was one of fourteen cases discovered by the chemist of candy containing silver coated pellets and listed by him as adulterated on the general theory, I suppose, that silver is indigestible and therefore harmful in candy. Perhaps the other thirteen cases were really prosecuted and are included in the "illegal" cases, but the record does not so show. Of course all that this indicates is that the commissioner when he came to make up his formal report did not throw any fits about the wicked adulterations of candy.

But had the chemist of Minnesota given the silver coated pellets more consideration he might have decided, at least he should have decided, not to list that product as adulterated, because in the first place the amount of silver in the coating is very small and in the second place the United States Circuit Court of Appeals in New York city some months ago in considering the legality of a product of that kind held that it was not adulterated because of the silver coating and that silver is not injurious to health. This was a decision under the national food law. But perhaps the chemist is one of those who believe they know more about the law than the courts do.

This brings us to two more instances of so-called adulteration in candy which the courts have recently held not to be adulteration: The first of these was on the question of the lac glaze which is used on fudge. It was claimed by Dr. Wiley and other officials that such candy was adulterated. But after a full investigation of the law and the facts in regard to this matter in a trial before a court and jury in Baltimore last November the jury returned a verdict of not guilty on every point raised against the candy. Still we find officials who unjustly continue to malign such candy and refuse to accept the decisions of the courts. The second matter referred to is the use of a small amount of talc for mechanical purposes in polishing certain classes of Easter candy. Minute traces of the talc remain on the outside of the candy, traces so small as to be detected only after a skillful chemical examination, and such candy has been denounced as adulterated. The United States District Court in Boston has just tried this issue and the jury after hearing all the facts, returned a verdict of "not adulterated." Still we may expect to find some officials unwilling to accept the decision of a fair and impartial jury on this matter.

Ohio lists four cases of candy "not passed," though no prosecutions were made. A statement in another part of the report seems to indicate that these cases were probably offenses against the color law of that state, but at any rate the commissioner does not attack candy in his report.

Illinois found eight cases of "misbranded" candy or confections. For example, a product called Fig Paste had no figs in it and was clearly misbranded.

On other packages the required address of the manufacturer was absent, or other required statements were not in proper sized type. The commissioner of Illinois, with his usual good judgment, declined to make prosecutions for these sales of "adulterated candy," but his state has not escaped being held up to the public as a place where great quantities of atrociously adulterated candy is sold to the alleged detriment of the health of the helpless children. Of course the facts point in an entirely different direction, but that does not stop the space writer who is looking for thrills.

Utah analyzed fifty-six samples of candy, none of them were adulterated, but three were condemned because they were wormy, dirty and unfit for food. South Dakota lists a couple of cases of spoiled nuts. North Dakota lists two cases of the presence of "paraffine-like body," but no prosecution on these are stated.

Pennsylvania lists two prosecutions upon glacé fruits containing sulphites, two candied fruits containing sulphites, six marshmallows containing sulphurous acid, one peanuts coated with shellac, eighteen cases rotten nuts. (The figures on candies just stated were omitted from the table published in the February issue.)

The "shellac" referred to is probably the same lac coating referred to above and held legal under the national food law. The law of Pennsylvania expressly permits the use of sulphurous acid or sulphur dioxide in dried fruits and molasses, and so it cannot be such a very bad thing in candy, especially when we remember that the amount in candy is about from one part in a million to ten parts in a million, an amount so small as to be found only by one of the most delicate tests known to chemists. In fact some chemists claim that such an amount cannot be detected and measured with any degree of accuracy.

Of course every food commissioner has inspected and analyzed candy as he does all other foods. Certainly it is not too much to assume that he has given special attention to candy because of the great amount of talk that there has been in regard to it, but no state of the number considered, and so far as known to me, no state anywhere has discovered any adulterations of candy except those here set forth. It will be seen that if the case against the American candy manufacturer rests upon the facts from the reports of these 19 commissioners, he has little to fear from a full and exhaustive investigation of his product. The public is under vast obligations to the Commissioner of Pennsylvania for conducting just such an investigation, with special reference to cheap candies.

He said in his Bulletin before the beginning of that investigation in July, 1911: "There has been a good deal of talk about these products, some alleging even that certain of the chocolates owe their color not to the delicious paste from the cocoa bean, but to paint stuffs or ochre; that some of the fudges contain arsenic in considerable amounts, that the bright hues that delight the eyes and fix the fancy of our little tots are not of wholesome vegetable kinds, but are undesirable dyes made from coal tar without due care as to their freedom from poisonous or unwholesome by-products, and that talc or soapstone is sometimes used to give weight, in place of wholesome food materials."

And he added, "the guilty will be vigorously prosecuted; but if they fail to appear upon this extensive examination, it is hoped that parents' fears may be allayed, the children's pleasure be no longer disturbed

and confectioners' interests freed from unjust annoyance."

The report of this investigation was published under date of Dec. 1, 1911, and is written by the Chemist, Charles H. Lawall. After referring to the fact that the only other investigation of candies was one by Dr. Wiley in 1892, and after very politely saying that that investigation was of mighty little account, the writer proceeds to a real investigation of the candies sold in Pennsylvania. Two hundred and fifty-nine samples, procured in thirty counties of the state by three different inspectors, were analyzed and described. The weight of each candy sold for a cent, the appearance, the color and the general description of each sample was given. They were also analyzed for talc, terra alba, saccharin, benzoic or salicylic acid and sulphur dioxide and for the presence of foreign fats in the chocolate candies. Talc was present in three samples, and sulphur dioxide in but one. No other chemical or adulterant was found. The coal tar colors present were so far as possible to determine, the permitted colors only. In six cases tallow fat was present and in two cases cocoanut fat was present in chocolate candies. The cheap character of the candies investigated is shown by the fact that sixty-two of the samples are stated to have been "dirty," "very dirty," "horribly dirty," or were composed in part of nuts that were wormy. In a couple of cases the presence of resinous glaze was discovered in "amount so small that it was barely recognizable." Even in this bulletin the chemist in a number of places hints that the condition of candies in Pennsylvania "formerly" were mighty bad and takes a pardonable pride in the present "marked improvement" in the situation. Perhaps the pride has blinded him to the fact that the official records of the department never showed any very horrible or widespread evil conditions in the candy situation in his state, and that while special instances might come to his attention that they did not at all represent a universal condition. However, this bulletin and the investigation upon which it is founded relieve our minds very much from the too general impression that confectionery, particularly of the cheap sorts, was badly adulterated.

But no such relief is obtained from a contemplation of the sanitary conditions of the candy. Twenty-four per cent of the candy was vile with dirt of every kind. I believe that an investigation of the cheap candies in every state would reveal a like condition in too many cases. There is no doubt but that the manufacturer puts up his candy in clean looking packages, but he is mighty near helpless to control it when it falls into the hands of the street vendor or the cheap candy store man. What a wonder that sane American citizens will step up to the open cart of the candy vendor, on a street dry and dusty and will purchase a quantity of candy "for the children." The only possible explanation is that it is a habit, a mighty bad habit and one that doubtless entails serious results to the health of the one unfortunate enough to be the recipient of such confectionery.

As shown by the reports of detected candy violations in the reports of the seventeen commissioners tabulated in the February issue of the AMERICAN FOOD JOURNAL, candy is not now, at any rate, much found in the column of violations. Indeed the adulterations of candy are almost wholly of the "used to be" type, the record of which is in the hazy recollection of some one rather than set down in the cold print in the column of prosecutions finished.

The So-Called Everglades Scandal

By Our Staff Correspondent.

WASHINGTON, D. C., March 10, 1912.

Anybody with any crookedness to be obscured, or the interests of a trust to promote need only suggest that James Wilson, Secretary of Agriculture for fifteen years on the fourth of this month, has "interfered" with Dr. Wiley or some other holier than thou defender of a trust, and the work is more than half accomplished. The Associated Press Washington office will take the unsupported charge and send it broadcast as if it were all true as gospel. Then when a hostile committee, like that headed by Congressman Moss, reports that a payment was invalid or illegal, the Washington office of the Associated Press will obligingly report that the committee found the payment "irregular."

The foregoing assertions are submitted at this time on account of the positively false character of the impressions created throughout the country by the reports sent out concerning the "scandal" in connection with the investigation of the Florida everglade surveys. Frank Clark, a member of Congress from Florida, after refusing or neglecting to look at documents gathered together by Secretary Wilson, went before the eminently respectable and highly moral Moss committee, with a demand for an investigation of Wilson's department to learn why certain reports of drainage investigations of the Florida everglades had not been published and why a circular got out by one of the drainage engineers in the department had been ordered discontinued.

The documents which Clark would not look at, although they were held on Solicitor George P. McCabe's desk for him for two weeks, disclose that Wilson ordered the discontinuance of the circular because its publication had not been authorized by him and it contained matter that had not been written by J. O. Wright, the department's drainage engineer who did the field work. That is why the circular was suppressed.

The secretary refused to publish the results of the drainage investigation made in co-operation with the state of Florida when he found out that Charles G. Elliott, Wright's superior, had made radical changes in his own revision of Wright's report, going so far as to change figures purporting to be accurate in the first instance and making those changes without an iota of additional investigation having been made. Elliott made three guesses as to what sort of a report should be made on the work of Wright in addition to putting out a circular, without authority, purporting to be a report, which contained an excerpt from the Wright report and some matters the origin of which has not been indicated in the investigation that has been made by the Moss committee.

All this could have been learned by Clark of Florida, and Bathrick of Ohio, another member who joined the Florida man in making what the Associated Press reports have referred to as charges. But they would not look at the documents. Instead they made it a point to induce publication of insinuations that there is crookedness in the Department of Agriculture.

There was, but not where Clark and Bathrick were looking for it. Elliott and Morehouse, his assistant, have been dismissed on an accusation that they submitted false vouchers. The Associated Press, following the precedent in its abstract of the Moss committee report, will probably refer to the vouchers as having been "irregular." In addition to that, the papers in the case have been sent to the local grand jury. Upon advice of counsel, Elliott and Morehouse declined to answer questions when Solicitor McCabe told them enough to indicate to them that they might reasonably expect to be called upon to make explanations to a jury, if the investigation of the grand jury resulted as McCabe thought it might.

The two engineers, Elliott and Morehouse, said they were advised to make the kind of accounts they did by F. E. Singleton, an accountant in the department. Singleton said he did not. To be on the safe side Secretary Wilson suspended him.

The dismissal of these men is merely a sidelight on the matter. When Clark started the Moss committee on its inquiry, Wright, who is now drainage engineer employed by the state of Florida in the actual work of draining the Everglades, got the worst of it. So he came to Washington to look after his own interests. Talking with A. Zappone, disbursing officer for the department, Wright remarked that

Elliott had better let up on his hounding of him because he knew of the crookedness in his accounts. Zappone, knowing that he is responsible on his bond for illegal payments and being withal a thrifty Italian, took an immense interest in the charge of crooked accounts. He had just gone through the juggled account that figured in the Wiley investigation and out of which the chief chemist crawled by saying he had never received the letter in which the proposition to juggle the accounts was made, and he did not want any more of it.

Wright told him how the accounts for June, 1909, were overdrawn and how dummies were put on the pay-roll for July, 1910, to get back the money advanced by various men. There was no stealing from the government, unless a promise that each of the dummies should receive interest on the money advanced by him and "something for his trouble" amounts to a theft.

It was easy to unearth the false vouchers after the tip had been given. The virtuous Moss committee made an effort to throw discredit on the action of the department by suggesting that the false voucher business was condoned until it was necessary to destroy the effect of testimony that might be given by the dismissed engineers. That suggestion went well until McCabe made it plain to the committee that, but for the row between the engineers, the department might never have known about the crooked work until the three years provided by the statute of limitations had expired. The Clark people tried to break the effect of that incident by suggesting that Wright was as crooked as Elliott and Morehouse, if what they did is so reprehensible, and it was further suggested that Wright was not much of an engineer anyhow.

They brought in Arthur E. Morgan, of the Morgan Engineering Company of Memphis, Tenn., who is a former employe of the office from which Elliott and Morehouse were dismissed. He made a fine witness—for the Secretary of Agriculture. He was cross examined by Solicitor McCabe and by his answers brought to light the fact that Elliott and Morehouse, as officials of the government, distributed literature, plain advertising for the Morgan concern, and recommended it to citizens who wanted to know about drainage engineers.

McCabe also brought out the fact that when Morgan had finished one job, near Texarkana, the people for whom it was done wanted to have the work inspected by a Government engineer. On Morgan's request the office here recommended a man whose name appeared on the letterheads of the Morgan Company as an employe of theirs. Morgan admitted that the man recommended as the representative of the Federal Government was a member of the Morgan firm for two periods.

This was a fine arrangement—for Morgan, the witness brought on by the Clark people to prove that Wright, now the drainage engineer for Florida, is not much of an engineer, and besides he was involved in questionable land deals. Elliott and Morehouse, whenever any of the people who were helping pay their salaries wanted advice as to engineers, tipped off the fact to Morgan. Then they recommended Morgan to the inquirers. When Elliott and Morehouse were asked as to whether the bids of Morgan were not a bit high, they said they did not think them much, if any out of line. Then when the people who hired Morgan wanted a Government engineer Morgan suggested that they recommend, in one case, at least, an engineer who had been a member of the Morgan firm, and also one of its staff of consulting engineers.

But the climax came on March 8 when Representative Frank Clark went on the stand to repeat the story he had told the Spartan Moss committee on the day he made his so-called charges. On that day McCabe butted in on a lovely little frame-up. Bathrick and Clark had told their stories without any notice having been given to Secretary Wilson that he might be present or have somebody to represent him.

McCabe insisted on giving Wilson's side of the matter. The impartial Moss, the man who is so fair and square that he leans backward and would probably have Willis Moore indicted for high crime and treason were Moore to put a weather bureau anywhere in Mr. Moss' district, said it was twelve o'clock and the committee must quit because it had

no authority to sit during sessions of the House. McCabe said it was two minutes to twelve and intimated that he could say a good deal in that length of time. He did.

The substance of what he said is that hereinbefore set forth indicating that Clark never was acting in anything except the worst possible faith, and the most reasonable explanation for that bad faith was either that the Florida congressman had failed in some attempt at a land deal himself or that the exigencies of Florida politics required that he do something to enable him to hold himself up as a patriot, by trying to prevent the Secretary of Agriculture from giving his help to some disreputable scheme.

The climax came in the form of a photographic copy of a letter Clark wrote to B. W. Helm, vice-president of the Everglade Land Sale Company of Chicago. Solicitor McCabe produced it and made Clark admit that he had written it. In that letter Clark suggested that the land company enter a deal with him to sell 32,000 acres of cut-over timber land, not in the glades and therefore in a way competing with the land the sales company was trying to put on the market. Clark said the owner wanted \$300,000 for the land and that he and Helm could divide anything over that sum.

Before submitting the copy of the letter McCabe asked if it was not a fact that Clark had tried to actively associate himself with some of the land companies he has been denouncing as land sharks. Clark said he didn't think so, which is a funny answer for a straightforward man to make with regard to a matter involving a sum that would look respectable even to John D. Rockefeller. When McCabe wanted to know whether he had not written a letter proposing a deal he said he might have.

Thereupon the solicitor produced the copy and Clark admitted he had written it. Readers of newspapers which depend upon the Associated Press for a report of that incident will never learn from the report of it any of the language used by Clark, which, if McCabe had not been in possession of the photographic copy, would have been quoted as being a denial by Clark. Its report had it that McCabe tried to make Clark admit that he had written such a letter.

When McCabe directed Clark to read it, the Florida congressman put out what seemed like an appeal for help. He said the committee might object. But the committee did not come to his rescue. The copy was passed around the room. Floyd asked McCabe the object of bringing in the letter. McCabe said it seemed pertinent to the inquiry. Then the omniscient Moss delivered himself of an opinion that will undoubtedly give the earth a decided tilt in his direction, so weighty is it. He said he had no doubt it should be kept out of the record but he would not take the responsibility of ruling it out. So Clark read it into the record.

Immediately after that incident McCabe laid the foundation for another. He got Clark to admit that he had procured an appropriation to drain lands along the St. John's river. Then he demanded to know whether Clark had ever got a Washington real estate man named Plummer to write a letter suggesting to a land company that it get in and buy some of that land along the river as he had procured an appropriation to drain it and that therefore it was advisable to buy early before folks realized how valuable the land would become.

The Florida member indignantly denied any such incident. "Then if Plummer did anything of the kind," McCabe suggested, "he misrepresented you?" Clark said he certainly did. Thereupon McCabe had the committee issue a subpoena requiring Plummer to appear before the committee.

The fact that there was such an incident as the Plummer letter has not been published except in newspapers whose correspondents sent special accounts of it.

The hostility of the press associations and certain of the big New York newspapers toward Secretary Wilson in the Wiley and Everglade investigations had no effect upon the members of the House. The pro-Wiley junta tried, when the item about McCabe's salary came up in the agricultural appropriation bill, to have it ruled out on a point of order made by this same Clark that McCabe put on the defensive on March 8. The point was overruled and efforts to have the salary stricken out by vote of the House sitting as a Committee of the Whole failed.

In other words, the House, though composed of a majority hostile politically to the secretary, refused to take any stock in the press agent work done during the Wiley investigation. In effect it remarked that the Moss committee report amounted to less than so much waste paper. Congress disposes of waste paper by resolution. It did nothing with the Moss committee report, the contradictions in which were so glaring as to make it ridiculous.

INDIANA LETTER.

(From a Staff Correspondent.)

INDIANAPOLIS, IND., March 10, 1912.

Reports to the food and drug laboratories of the Indiana State Board of Health indicate that Chicago manufacturers of meat products, such as Hamburg steaks, sausages, etc., have begun to ship into this state, on an extensive scale, meat products in which sulphites have been introduced as a preservative. Several retail dealers handling the Chicago products have been fined under the Indiana law for selling meats with forbidden preservatives, and there are several other prosecutions pending at this time. Sulphites are among the preservatives expressly forbidden by the Indiana pure food law. The objection to their use as stated by the board, which prompted the enactment of the law, is that the sulphites act on the meat in such a way as to preserve its redness and original appearance of freshness, thus enabling the manufacturer of meat products to use old material in the manufacture, producing a product that looks fresh, when it is not.

Some half dozen cases have been filed by the laboratory authorities in the Indianapolis courts against manufacturers and dealers in crushed fruits and sirups for soda fountain use who have been using formic acid as a preservative. As set out in a previous letter to the AMERICAN FOOD JOURNAL, the laboratory authorities spent several weeks studying the formic acid question in the state, and finally reached the conclusion that crushed fruit and sirup manufacturers and dealers were using the acid as a substitute for benzoate of soda, which has been outlawed by a decree of the State Board of Health. Numerous samples of sirups and fruits collected in this city gave formic acid reactions in the laboratory tests, and a number of the manufacturers and dealers acknowledged they had been using the preservative. One manufacturer said he had been using it for eighteen years.

The Indiana law does not expressly forbid the use of the acid, because when the law was drawn, the state authorities did not suspect that it was used, or would be used, as a preservative. But the law is drawn so as to limit the preservatives to a certain list set out, and formic acid is not contained in the list. The laboratory authorities have filed their actions on the ground that since the acid is not enumerated as a permissible preservative, it cannot be used legally.

The new weights and measures law, which became effective at the beginning of the current calendar year, is rapidly taking hold all over the state. The law does not make it mandatory on cities and counties to employ special sealers of weights and measures, but some fifty or sixty such officials have been named, and will meet in this city in a few days for three days of schooling and demonstration under the direction of the state commissioner and an agent of the federal government. Dr. H. E. Barnarde, Chief Chemist for the State Board of Health, and ex officio State Sealer, has called in two or three of his food and drug inspectors, and has set them at work as deputy sealers, who will spend the next six months visiting various cities and counties, where they will make tests and confiscate illegal weights and measures. The department has purchased an outfit for the state at a cost of \$1,500, thus greatly reducing the extra \$5,000 appropriated by the recent General Assembly for additional work in foods and drugs.

The commissioner is preparing to issue, under authority given him by the new law, a list of rules governing the use of measures, especially dry measures, to be promulgated in time for the approaching small fruit season. Among other things that will receive attention is the berry box with the raised bottom. The raised bottom, as such, will not be molested, but the cubic contents above it, if a quart box, must be sufficient to contain a quart, dry measure, otherwise the dealers will be prosecuted. This will apply to berries received from outside the state as well as those packed in Indiana. Further, the "bottomless" measure, the measure of great depth and small diameter, and the measure with one compartment at one end and another at the other, all must go. As rapidly as possible, the shallow measure of large diameter is to be substituted.

A number of affidavits have been prepared for filing against grocers offering for sale a butter product made by a patented process, which consists in taking a pound of butter and working into it a pound of milk, to make a two-pound product. It is held by the authorities it is adulterated.

The recent order of the Federal Government concerning vinegar has been adopted in toto as a working basis by the Indiana department. The adoption brings a number of changes into the state concerning labeling and the like.

Standards of Food Products in Commerce

By Dr. Anthony McGill.

All foodstuffs, whatever their origin, are by their very nature perishable; and the products of putrefaction and decay, while often positively harmful or poisonous, are always of a kind to lessen or totally destroy the value of the article. Hence it goes without saying that a first consideration in defining a food substance is that it shall be sound. In the case of unmanufactured foods, a condition of definition which can scarcely be objected to, is that the article shall have had its natural or normal origin. For example, milk must be entirely the product of the cow, and maple syrup must be entirely the product of the sap of the maple tree. That potatoes, apples, and other fruit should be of a certain size in order to claim legal currency may be argued, but is of less importance than that eggs should neither be required to be of stated size, or that they should come into commerce by weight rather than by number. The question of the size of eggs was less imperative in days when the purchaser saw what he was buying than it is now, when so many retail purchases are made by telephone. Definition through requiring that the article should have a stated origin is sometimes sufficient to ensure its genuineness, without the introduction of numerical data as to composition or content. Milk, when required to be solely the entire product of the complete milking of one or more cows, is assured of qualitative proximate composition. Not so, quantitatively. The skill of the breeder has resulted in producing Jersey cattle on the one hand, yielding milk with over 8 per cent butter fat, and Holsteins, on the other hand, yielding milk with barely 2 per cent fat. It may yet be possible to lower this record, and make the cow but little better than a whey producer. It must surely be within the rights of a community, willing to pay for what it gets, to state just what it is willing to buy and pay for as milk. In Canada, since December, 1910, milk has been legally defined as follows: "Milk, unless otherwise specified, is a fresh, clean and unaltered product, obtained by the complete, uninterrupted milking, under proper sanitary conditions, of one or more healthy cows, properly fed and kept, excluding that obtained within two weeks before and one week after calving, and contains not less than 3.25 per cent of milk fat, and not less than 8.5 per cent of milk solids, other than fat." This does not prevent the sale of any wholesome milk as food, if properly described. It only asserts that the article designated simply as milk, shall have a definite and fixed minimum value. This action of the Governor-in-Council, as empowered by Section 26 of the Adulteration of Food Act fixes a legal minimum value for milk throughout the Dominion of Canada. It does not, however, as I understand the matter, deprive any municipality or any individual of the right to set a higher standard for milk, within the limit of his own jurisdiction. The limit for butter fat in milk is defined by the Adulteration Act as 3.25 per cent. But the City of Ottawa by by-law fixes a limit of 3.5 per cent. The cities of Brantford and Regina fix the same limit, and there is nothing to prevent the fixing of a 4 per cent standard, locally, except the danger of excluding the article as producible in the locality.

The producer of a new food is naturally opposed to giving it a new name if an old and well-known name can be made to do. Demand for a new product under a new name has to be cultivated; the public has to be educated, which is a costly matter. Where (as in patent medicines) the name of a largely advertised article is proprietary, the man who would introduce something of a similar kind must devise a new and distinctive name for his preparation, not so much for his own protection, at first, as because the law protects the other man, and forbids infringement. It is different with food names, which are not legally protected; and one of the objects of food definition is the practical copyrighting of these terms in the interest of the public, whose property they are. The manufacturer of oleomargarine would fain call his product "butter"; cottonseed stearin, tallow and oil in admixture are offered as "lard"; liquid glucose masks as "syrup"; solid glucose would like to be called "sugar"; acid calcium phosphate prefers to be called "cream of tartar"; dilute acetic acid chooses to be known as "vinegar"; a richly

dyed glue solution aims at being sold as "red currant jelly"; cottonseed oil as "olive oil," and so on. It is not that, as in most of these cases, the thing in itself is not well worthy of a place among foods. Cottonseed oil is possibly as desirable a food material as olive oil, but olive oil came to be known first; the taste for it has been developed. There is a demand for olive oil. Only after great expenditure of money, extensive educational work, and much insistent advertising, can a wide demand for cottonseed oil be created. It was, therefore, introduced in disguise. One American manufacturer sells as "Cottolene" a lard substitute prepared from cottonseed. I wish I could point to more instances of that sort. Corn syrup is another good name for a product that scorns to parade for anything except what it really is—a corn product. The attempt to disguise a glucose syrup under the name simply syrup, or table syrup, or golden syrup, so long and widely known as a cane-sugar product, should be illegal.

The most important and fundamental conception that underlies the use of names is, of course, that they shall so designate the article as to prevent deception. Whatever a thing is called, that thing it should be. This assumes definite knowledge on the part of the producer and of the purchaser. But language has developed in exactitude only as the ideas held by the users of words have become clearer. It is still found necessary, in philosophic and scientific treatises, to begin by exactly defining the terms which the author proposes to employ. Examples pertinent to our subject are not difficult to find. The word milk as the name of a food material used in Canada, means cows' milk; but it is evident that this word, in a natural history of the mammalia, would have a much wider comprehension. So with words like flour, bread, salt, alcohol, breakfast food, sugar syrup, etc. Many words which in the first instance had a perfectly definite meaning, have come to be generic rather than specific. Such are vinegar, beer, syrup, sugar, alcohol, etc.

I have made some suggestions regarding the standardizing of vinegar in Bulletin 223, issued in April last. These exemplify the very converse of the recommendation made with regard to unmanufactured foods; that the definition should begin by requiring the article to have had a stated source or origin. Since changes in mode of manufacture or artificial production are consistent with and in the order of improvement, it would evidently be a mistake to require fixity of method in production. Vinegar, as the name implies, was originally the product of the souring of wine; and, in wine-growing countries this is still a source of vinegar. But the vinegar made from wines bears a very small proportion to the total vinegar production of the world today. We are therefore compelled to look to other characters than its source, if we would define vinegar consistently with modern usage. Vinegar, as produced from wine, contains many other things than acetic acid; but if we would include under this term all the modern vinegars we shall find that acetic acid is the only characteristic component common to them all. In other words, the term vinegar, used without qualification, means nothing more than pure acetic acid of a certain degree of dilution. This suggested definition is open to criticism. It is not consistent with the definition of vinegar given in the fifth schedule of the Adulteration Act, which defines vinegar as "A more or less colored liquid, consisting essentially of impure dilute acetic acid, obtained by the oxidation of wine, beer, cider, or other alcoholic liquid." This is the legal definition of vinegar in Canada today. It is evident that it contemplated the acetous fermentation of alcohol, as essential to the production of vinegar. And there are many who would restrict the term as indicated. The *Zeitschrift für Nahrungs und Genussmittel* of July 15 contains a most interesting and instructive discussion of the subject by the Society of Food Chemists of Germany in its meeting at Dresden. They reached a conclusion in which nothing is concluded.

I think it practically hopeless so to define a manufactured food that we shall be able to say of a sample, "This article fulfills the requirements of the definition, and is therefore genuine." What we may hope to achieve is the fixing of

numerical or other constants such as shall enable us to say, "This article fails to meet requirements, and is therefore not genuine."

There are some who consider it unwise to publish the analyst's findings, or the basis of his interpretation of these as proving adulteration. They say, it is enough that such data be put in as evidence in court; and it is unwise as handicapping further police work, to make unnecessarily public the details of the matter. I remember being taken to task some years ago for mentioning that invert sugar was practically identical with honey, and that a carefully prepared invert sugar, if mixed with honey, was very difficult and often impossible of detection. My critic considered this to be a very dangerous admission, especially so when he learned how easily invert sugar could be prepared.

If we make widely known the characters upon which we base our conclusions as to genuineness, we must expect to have skillfully directed frauds to combat. Manufacturers of surrogate articles will endeavor to meet the requirements of our standards as closely as possible, and may succeed in doing so with such exactness that an imitation product shall be indistinguishable from the real. Where it can be shown that such is the case, and that expert methods, chemical or other, are unable to discriminate between the true and the false, there remains no other way of protecting the public than governmental inspection of manufacture, or the offering of rewards for information that will convict; and I think that there should be a candid acknowledgment of this fact, as of all other facts.

The case of maple syrup affords a good illustration of the matter in hand. We have relied upon the persistent presence of certain non-sugars in maple syrup, as a means of distinguishing it from simple syrup. These are mainly its ash content, the character of the ash; and most important, the presence of malic acid and other organic matters, to which the characteristic flavor is due. Based upon the examination of many hundreds of samples of maple syrup, we recommended standards which were made legal on the 25th April last. These required a minimum ash content of 0.5 per cent, a malic acid content of at least 0.4 per cent, and a lead subacetate number not less than 2.2, the process for determining such number being carefully described. Complaints, apparently well founded, were made to the effect that the numerical standards legalized caused undoubtedly genuine maple syrup to be suspected or even condemned. The question became so urgent that I made further investigation; and 456 samples of syrup, of guaranteed genuineness, have lately been analyzed with results confirming in large degree the objections taken to our standards. It appears to be a fact that, with increased care and cleanliness in handling the sap, and improved apparatus in concentrating it, the non-sugar components of maple syrup can be reduced below the amounts fixed as minima by our standards. Particularly is this true of malic acid and the lead subacetate number.

I am quite unable to sympathize with those who would keep hidden facts like these. We want to take no advantage that can be won through keeping others in ignorance. Such victory is contemptible, and is beneath the dignity of any self-respecting individual, to say nothing of officials. If it is, as I hear some say, the basis of profitable trade, then away with profitable trade, and let us remain poor and self-respecting.

An incidental advantage in having a recognized standard is that the article, when genuine and up to standard requirements, may be so described, without the need of giving actual percentage of purity. This may appear a small matter to some, and an undesirable restriction to others, who, if they produce a really superior article—better than standard requirements, would wish to have that fact made public. From the point of view of encouragement to industrial improvement, this contention is reasonable enough; but in actual working out it amounts to an advertisement of the manufacturer, and a handicap to competitors who nevertheless produce standard goods. The case of cream of tartar may be cited in illustration. The British Pharmacopœia requires, for purified cream of tartar, a content of 97½ per cent actual bi-tartrate of potash. It would be unreasonable to refuse recognition to an article which meets pharmacopœial requirements. Yet it is possible to put on the market an article of cream of tartar up to 99 per cent of bi-tartrate, or even higher. The difference in baking value is not great—but it is easy to make the purchaser believe that the latter article is a very superior one. To the extent of the difference in percentage it unquestionably is superior, and if the object had in view by the Adulteration Act were primarily the

encouraging of improvement in quality, it would be right to make note of this fact. But I regard the intention of the act in question as fundamentally of police character, i. e., the prevention of fraud. It must be left to the manufacturer of higher class goods than the standard demands, to do his own advertising.

The very large question of preservatives in foods demands most careful consideration. My own knowledge of the subject, although I have lost no opportunity of making it as full and complete as possible, is not such as to have led me to positive conclusions. Dr. Wiley wrote me recently as follows: "I expect to continue to work in this country until I see the whole company of preservatives and coloring matters in the bone yard." On the other hand, so great authorities as Dr. Lebbin, of Berlin, the late Professor Liebreich, and others, have, after exhaustive investigations, come to the conclusion that "no objection can be raised, on sanitary grounds, to the use of boric acid as a food preservative."* In his own country a board of thoroughly credible experts has reached the same conclusion† as regards benzoate of soda, which was at first placed under the ban, through the influence of Dr. Wiley. The whole question bristles with difficulties. It won't do to infer that because an article is harmful to health, in certain amounts, we must condemn foods containing it in smaller proportions. Cranberries contain benzoic acid; spinach contains arsenic; potatoes contain solanine; tox-albumins occur in peas and beans; prussic acid in cherries. Then on the other hand, while no one thinks of completely banishing the time-honored preservatives—salt, sugar, vinegar, spices, smoke (creosote), alcohol—it is easily demonstrated that each of these is capable of doing positive injury to digestion in certain cases. It is quite rational to suppose that nature provides these substances to the fruits containing them for the very purpose of restraining too ready decay. And this may be true of tannic, citric and other organic acids, so widely distributed throughout the vegetable kingdom. The following sentence from the pen of Dr. Roseman, a distinguished food chemist of Germany, is worth noting: "When the advocates of total abstinence maintain that whatever is harmful in large quantities is not unwholesome even when in small quantities, they are maintaining a proposition which is undoubtedly untenable."‡ I cannot but endorse this statement. Indeed, it is safe to say that there is no form of food which may not do harm, if used beyond a proper and needed amount. Very few of us die of starvation, while our hospitals and cemeteries are full of the victims of gluttony.

It is in the nature of food that it is perishable. Few, if any, are so placed as to command fresh food throughout the whole year; many, perhaps most of us, are forced to resort to preserved foods all the year round. The canning of foods is expensive, and even when carried out with every practicable precaution, is not a guarantee of safety. Apart from the possibility that here and there a can may escape complete sterilization, we must recognize that the material of the can and the solder used are elements of danger. No attempts to preserve meats, on the large scale, by hermetic sealing, can hope for commercial success. Think what it would mean to apply this method of preservation to ham and bacon, to fish and meat, in the large way.

For the conservation of these articles we must resort to chemical preservation, whether by the older, antiseptics—salt, saltpetre, creosote—or by the newer ones—borax, benzoates, etc. All are objectionable, and I cannot help thinking that had the last named been used by our ancestors, and salt, sugar and smoke but lately been introduced, the same objections would be urged against these as are now employed against their supplanters. It is wonderful how tolerant we become to old acquaintances. The natural products of decay are so wholly revolting and dangerous that we are compelled to seek some method of preventing decay. It is asserted that, since 1906, there are 26,311 recorded cases of ptomaine poisoning in the United States, of which 1,078 proved fatal. What the number might have been but for the use of preservatives, it is terrible to think of it. Most of these cases, it is true, come from the improper use of canned meats and milk. The contents of a can are not wholly disposed of when first opened; the partially filled can is set aside, and putridity, not necessarily so intense as to appeal to the senses, sets in before the remainder is used as food. It is generally known that a sterilized food undergoes a more dangerous form of decomposition when once decay sets in than is the case with a normal one.

Not all microbial life is inimical to health. Sterilization

*Die Medicinische Woche, 23 Sept., 1901.

†Food Inspection Decision 104, Cancelling F. I. D. 76 and 89.

destroys all alike, and the putrefactive organisms are liable to be first in the field, when the way is left open to them. Whether we view the matter from the point of view of economy in production and distribution, or from that of safety to the health of the consumer, it is difficult to see how we can altogether dispense with preservatives.

It remains to devise means of regulating their use. Broadly speaking, they fall into two classes: First, those which declare their presence to the senses; second, those whose presence can only be ascertained by special (usually chemical) tests. To the first class belong most of the older preservatives, e. g., salt, sugar, vinegar, spices, alcohol, smoke, essential oils, fixed oils and fats. The fact of their presence being known to the consumer, it only remains for him to acquaint himself regarding their dangerousness in his own case. While most of us are able to use sugar with impunity, there are some to whom it is harmful; and this is probably true of most of the other substances named. We cannot undertake to protect by legislation the wilfully ignorant.

The second class of preservatives comprises the so-called "chemical preservatives," of which boric acid and borax, benzoic acid and benzoates; salicylic acid and salicylates, formaldehyde, formic acid, fluorides, B-naphthol, abradol, and saccharin, are most in evidence at present. They are characterized by a much greater potency than the older preservatives. There can be no doubt whatever that they are capable, in certain quantities, of doing serious injury to health. This is, however, true of the substances of the first class; indeed, must in the nature of the case be true of any effective preservative added to food. The only question for the expert is, can they be employed in quantities so small that, while efficacious for purposes of preserving otherwise perishable foods, they are without harmful effect on the health? This is clearly a matter to be established by evidence. We have available to us the results of prolonged, painstaking, and elaborate research, and the results are very contradictory in most cases. It is regrettable that some of the most elaborate of these researches have too evidently been undertaken and prosecuted with a bias. Sometimes the investigator has sought to establish a preconceived opinion hostile to preservatives; more frequently he has carried out his research in the interests of employers who had financial interests at stake; and however high principled he may have been, it remains that his hope took a certain definite direction. This is only human nature; and we know how often the wish is father to the thought.

It seems to me that the consensus of opinion of medical men, in actual practice, would go a long way towards giving us the information needed. The opinion of single individuals may be worthless, from many causes; the opinion of the profession, as a whole, would carry greater weight. I have before me information to the effect that the Medical Council of the Prussian Government at Berlin has unanimously recommended that benzoic acid and its salts be excluded from all food products.*

Where foods are specially intended for the use of infants and invalids, I think it is desirable that they should be entirely free from potent chemical preservatives. It seems also reasonable to demand that whenever a preservative which does not indicate its presence to the senses of the purchaser, as by taste, smell, or other property, the fact of the presence of such preservative should be plainly stated on the label.

It is further clear that no greater amount of any chemical preservative should be permitted than the minimum amount necessary to give keeping quality to the food containing it; and, when it is ascertained that any substance requires to be added for efficient preservation, in amounts dangerous to health, such substance should be entirely prohibited by law.

It is often urged against the use of preservatives that they make it possible for the manufacturer to be careless as regards the soundness of the material he uses, or uncleanly in his methods of work. This is really not an argument against preservatives; but is a strong argument for the most efficient inspection and control of all places where food is prepared. If preservatives are capable of disguising decayed meats or vegetables, and making them salable commodities, such preservatives must belong to the class which possesses distinct sapience and flavor. I can conceive of salt, vinegar, and spices being used to conceal putrefactive change; but it is difficult to see how the so-called chemical preservatives, in the minute quantities in which alone they can be used, and themselves being by nature tasteless and odorless, could possibly disguise organic decay.

*Private communication from Dr. Wiley.

No country in the world has taken the step of legally prohibiting the employment of preservatives, even of the newer, so-called chemical preservatives. I do not understand how in the light of our present knowledge such a step could be taken and maintained. To forbid the use of the newer preservative, while condoning the older ones, would be irrational, as there is no greater evidence of the harmfulness of boric acid than can be produced for the harmfulness of common salt, or vinegar, in excess. Of course the limit of danger has to be set lower, as a percentage weight, for boric acid than for salt; but when the specific inhibitive power of each is made the basis of comparison, these antiseptics are found to be in the same class.

The question of coloring matter is too large to be fully discussed here. The act prohibits the use of coloring matters when these are harmful to health, or employed for the purpose of fraud, as in making an article seem to be what it is not, or in enhancing the apparent value of an inferior product. The use of colors to give attractiveness to a food, without violating the above-named conditions, cannot be objected to. Not only candies, but cheese, butter, cake-icing, and other foods are legitimately colored for this reason. An interesting case is the use of copper in coloring peas. Canned peas, particularly those known as French peas, are given an attractive green color by the use of copper salts. The copper appears to form an insoluble compound with the legumin of the peas, and it is found that the desired result can be attained with less than 100 parts of metallic copper per million parts by weight of the peas (1 part in 10,000). This minute amount of copper has not been shown to have any harmful effects upon health. When exceeded the excess of copper can be washed out by water, in great part, and would therefore be extracted in boiling the peas. Since, however, the water used in boiling might be served with the peas, it has been recommended to fix 100 parts per million (0.7 grain per pound) as a maximum for copper in peas.

A NEW IDEA IN FOOD INSPECTION.

A general reorganization of the health, food, and sanitation departments of the larger cities of Kansas has been undertaken by the State Board of Health officials.

The plan is to have each of the larger cities enact ordinances for inspection of food stores, weights and measures, dairies and milk depots, hotels, restaurants, drug stores, etc., which will be practically word for word the same as the state laws. Then each city would appoint some one inspector to look after all these different sources of food and drug supply, and see to it that they conform to the state requirements.

At present, the inspectors from the state are able to visit the big towns only twice a year, and meantime, the local conditions sometimes become bad. Under the plan which is now being worked out, the city inspector, working under exactly the same rules and regulations as the state inspectors, will be on the job all the time.

Topeka, Wichita and Kansas City, Kans., already have systems of inspection which conform in whole or in part with state laws, and are not in serious need of change.

John Kleinhans, one of the state food inspectors, has been visiting some of the large towns in Kansas recently getting the city officials interested in the change, and the chances are that Ft. Scott, Pittsburg, Parsons, Coffeyville, Claute, Humboldt and several other large towns, will pass the necessary ordinances without much delay.

FRENCH FRIED POTATOES.

The street vending of "pommes frites," or French fried potatoes, is peculiar to the northern part of France, and the novelty of it appeals to those who visit this section of the country for the first time.

Pommes frites take the place of peanuts and popcorn, and are sold in much the same fashion. Not only is this trade carried on in some instances as a regularly established business, but workmen, wishing to increase their earnings, come out on the streets in the evening and sell these fried potatoes from pushcarts. Their profits often exceed their day's wages.

The pushcarts are of the ordinary type, but covered. A coke brazier is inserted through the flooring, over which is placed the large iron cauldron holding the fat obtained from beef suet. Raw potatoes, after being pared, are pressed through a special cutting machine, coming out in long, narrow, four-sided pieces. These are immediately put into the boiling fat, and in several minutes are thoroughly cooked. They are then salted, and sold in small paper cornucopias holding 1 or 2 cents' worth.

Secretary MacVeagh's Views on Saccharin

When it was announced from Washington on March 1st that the Cabinet officers in charge of promulgating regulations concerning foods had decided to reaffirm Food Inspection Decision No. 135, which prohibits the use of saccharin, it was stated that Franklin MacVeagh, Secretary of the Treasury, had dissented from the decision and that it was only adopted after James Wilson, Secretary of Agriculture, and Charles Nagel, Secretary of Commerce and Labor, had outvoted him. On March 7th Mr. MacVeagh's letter on the subject was made public, together with the communication sent by members of the Remsen Board, in both of which it is declared that the addition of small quantities of saccharin in foods does not constitute an adulteration.

Mr. MacVeagh in his letter confirms the statement repeatedly made by Francis E. Hamilton and W. M. Hough, attorneys for the saccharin manufacturers, namely, that Food Inspection Decision No. 135, originally issued on April 26, 1911, did not conform with the conclusions and recommendations of the Referee Board of Consulting Scientific Experts, which made an exhaustive study of the effect on health of the use of saccharin. The Secretary of the Treasury declares that Food Inspection Decision No. 135 is not a "correct interpretation of the board's decision," and that is "unwarranted and an error."

Following is Secretary MacVeagh's letter to Secretary Wilson, dated February 27, 1912:

DISSENTING OPINION OF SECRETARY MACVEAGH.

"I am forced to the conclusion that the proper interpretation of the decision of the Referee Board in the saccharin case is that saccharin is positively harmless in quantities that would in practice be consumed; and that saccharin does not deteriorate or reduce the food value of any article in which it is used as a sweetener. I am confirmed in this conclusion by the letter of the Referee Board to the Secretary of Agriculture, dated January 13, 1912.

"It is true that the Board adds, as an obvious fact, that as saccharin has no food value and sugar has a food value, the substitution of saccharin for sugar reduces the food value of the sweetened product, and hence is a reduction in its quality. But the meaning of this clearly is that there are two classes of food products which may be sweetened by either sugar or saccharin. In the one class sugar is a constituent—a recognized ingredient—of the article, as, for example, in preserves. Preserves are a product of fruit and sugar, and are so described and defined, I believe, by the rules established by the three secretaries. It is obvious that if saccharin should be substituted for sugar, in whole or in part, in preserves, it would be a substitution involving a reduction in the food value. On the other hand, in the case of canned vegetables—canned corn, for example—where sugar is not an essential ingredient, nor even a recognized ingredient, the use of saccharin instead of sugar would not be a substitution. Sweetened corn is not a combination of corn and sugar. The use of any sweetness in corn is to disguise its lack of natural sweetness; and the use of one sweetener rather than another cannot be called a substitution if neither sweetener is present as a necessary part of the product. Therefore, whether saccharin would be a substitution for sugar, with a consequent loss in food value, must be determined, as I think, by the character of the food product itself and whether it belongs to the one class or to the other.

"I prefer myself to use sugar as a sweetener in preference to saccharin; but this is obviously a personal prejudice and must not influence my judgment of what the decision of the Referee Board is. And obviously the Referee Board's decision leaves me with nothing but my prejudice. And I am bound to conclude that it is entirely feasible to adopt regulations, both as to the proportion of saccharin to be used and as to the publicity on the package of the use and amount of saccharin used, that will render its use positively harmless beyond any scientific doubt.

"It is, therefore, my judgment that Food Inspection Decision No. 135 should be withdrawn; and that a new decision should be constructed along the lines I have indicated.

"It should be stated that Food Inspection Decision No. 135 was signed by the three Secretaries because it was believed to be approved by the Referee Board as a correct interpretation of the board's decision. The three Secretaries intended to accept the decision of the Referee Board and it was supposed that they were doing so in Food Inspection Decision No. 135. But the assumption that Food Inspection Decision No. 135

had been approved by the Referee Board, or by the chairman of that board, as expressing its decision was, as it turned out, unwarranted and an error. And, therefore, a new hearing was given to the manufacturers of saccharin on November 22, after the Referee Board's report and decision had been printed; and this was the first time the question was discussed either before the three Secretaries or by the Secretaries in conference. The discussion has now been very complete, and has had additional light thrown upon it by the new letter of the Referee Board, dated January 13, in reply to a request from the Secretary of Agriculture to the chairman of the Referee Board for a further expression.

"At the hearing on November 22, after the argument, it was arranged that the counsel for the manufacturers, Messrs. Hamilton and Hough, should submit briefs of the arguments they had made; and add consideration of certain queries presented by the Secretaries. It was then announced that the Secretaries would appoint somebody to prepare a statement on the other side; and that Messrs. Hamilton and Hough would have an opportunity to reply to such statement.

"As a result Messrs. Hamilton and Hough have submitted briefs; these briefs have been submitted to Dr. H. W. Wiley, Dr. W. G. Bigelow and Dr. Kebler, of the Bureau of Chemistry, Department of Agriculture, and to Solicitor McCabe and Assistant Solicitor W. P. Jones, of that department; and these five gentlemen have submitted statements—all favoring the prohibition of saccharin—and Messrs. Hamilton and Hough have replied. And the full discussion is now before us in the printed record. The three Secretaries, at the hearing on November 22, asked the attorneys to incorporate in their briefs the proposal of a method to admit the use of saccharin in foods under conditions and restrictions that would limit its possible daily consumption within the limits of positive harmlessness indicated by the Referee Board, to wit, 0.3 gram per day; and this proposal has been submitted in definite form. And it seems to be plain—or at least most probable—that the limit of one one-hundredth of 1 per cent of saccharin in foods would bring the use of saccharin within the limits of positive harmlessness indicated by the Referee Board. But the calculation on which this is based should be further tested before adoption.

"The additional provision which the attorneys for the manufacturers propose, of indicating the use of saccharin and the amount used on the labels of all prepared foods sweetened with saccharin, would relieve the use of this ingredient of any charge of deception or fraud.

"Having arrived at what I believe to be the meaning of the report of the Referee Board, the remaining question in my mind is should we accept the findings of the Referee Board as conclusive? As to this, I feel that the conclusions of the Referee Board appeal with an authority that we cannot ignore. In the first place, the five men composing the Referee Board, taken individually and together, represent for us, in our circumstances, practical finality in scientific authority. Then, the experimental work of Professor Herter, of Columbia University, and Professor Folin, of Harvard University, with their numerous assistants, afforded the Referee Board such a basis for their mature study and conclusions that scarcely anything is lacking to the proper formation of a scientific conclusion. I, therefore, think we should accept the findings of the Referee Board as final."

SUPPLEMENTAL REPORT OF THE REFEREE BOARD.

Following is the letter of the Referee Board, addressed to Secretary Wilson on January 13, and signed by Professor Ira Remsen (chairman), Russell H. Chittenden, John H. Long and Alonzo E. Taylor, in which the arguments of Dr. Wiley are refuted:

"In reply to your request under date of December 30, 1911, that the Referee Board discuss Food Inspection Decision No. 135, and give a definite statement showing the opinion of the Referee Board as to whether the decision in question is in harmony with the conclusions presented by the board in its report on the influence of saccharin on the nutrition and health of man, the Referee Board respectfully submits the following statement:

"1. The findings of the Referee Board, based upon what would seem to be convincing, experimental evidence, are that small quantities of saccharin, up to 0.3 gram per day, are without deleterious or poisonous action and are not injurious to health. This being so, it would seemingly follow that foods to which small quantities of saccharin have been added—in

amounts insufficient to result in a daily intake of more than 0.3 gram—cannot be considered as adulterated, since foods so treated do not contain any added deleterious ingredient which may render the said food injurious to health.

"Admitting that large quantities of saccharin—over 0.3 gram per day—taken for long periods of time, may impair digestion, such evidence cannot consistently be accepted as an argument in favor of the view that smaller quantities must constitute a menace to health. It is often claimed that any substance having a deleterious effect on health, when taken in large amount, must necessarily be injurious even when consumed in very small quantities, and that it is dangerous to differentiate on the basis of quantity. There is, however, no justification for such a view from a physiological standpoint. Common custom, for example, sanctions the free use of vinegar or dilute acetic acid as a preservative; yet it is well known that in larger quantity acetic acid is a dangerous substance. Common salt, while harmless when taken in small quantities, may become a serious menace to health, if taken in larger quantities. The hydrochloric acid of the gastric juice is not only harmless but is essential for the welfare of the body, yet when its concentration is increased beyond a certain point it becomes a poison. It is evident, therefore, that the decision as to whether a certain substance is or is not injurious to health must take into account the quantity of the substance that is involved. The Referee Board is compelled, on the basis of the experimental evidence, to hold to the view that the addition of small quantities of saccharin to food does not constitute an adulteration, since there is no evidence that small quantities of the substance are deleterious to the health of normal adults.

"2. The addition of saccharin to foods, in large or small quantities, does not, so far as the findings of the Referee Board show, affect in any way the quality or strength of the food. This statement is not in any sense contradictory to, or lacking in harmony with, the statement that the addition of saccharin to a food as a substitute for cane sugar is a substitution involving a reduction in the food value of the sweetened product and may thus result in a reduction in its quality. The simple addition of saccharin to a food cannot, in the opinion of the Referee Board, be considered as an adulteration through any reduction in the strength or quality of the food, since no such effect follows its addition to the food. On the other hand, the substitution of saccharin for cane sugar, for example, in any food product may result in a decided lowering of food value, and this must certainly be considered as an adulteration.

"In the opinion of the Referee Board the use of saccharin in food in quantities that might constitute a menace to health is improbable, since its extreme sweetness would naturally limit its consumption by the individual to amounts below what might prove injurious (in harmony with the conclusions expressed in the original report of the board). On the other hand, the possibility of substituting saccharin for sugar, thereby lowering the food value of the sweetened products, is a serious menace and one that should be carefully safeguarded."

The regulation prohibiting the use of saccharin in foods will go into effect on April 1, 1912.

THE STOMACH THE HOME OF THE SOUL.

Kansas City, Mo., March 4.—A new religion, centering in the stomach instead of the soul, and having salvation of this life and not some future existence as its aim, is being launched in Kansas City by Mrs. Kathryn Boggs of Topeka.

"All religions of the past," says Mrs. Boggs, "have been bound with traditions and unnecessary formality and have made demands on human credulity which were unreasonable. Comfort, health, truth and peace, where they have been present in the religions of the past, were accidental. In my religion they are the objects."

Last Easter Mrs. Boggs opened Trinity Home in Topeka for the followers of what she terms "Practical Christianity." Whosoever wished to come was welcome. To this home she expects to return at some time in the future, and admit all who desire to live the new religion.

Some of the practices of this religion are: Daily baths—of sun, water or clay—she says there is nothing so good for the body as pure air, sunshine, water and soil. The religion is essentially one of the stomach. And the rule and guide to conduct is, "Be natural."

Mrs. Boggs says all life centers around the digestive apparatus. The first thing a little child uses is its stomach. She says its future depends more on this organ than on anything else. By treating it right the child may develop into a good man, and by treating it wrong it may develop into a criminal.—*St. Louis Globe-Democrat*.

GOVERNMENT LOSES CANDY CASES.

A number of cases that have been pending in the United States District Court in Boston against certain shipments of candy were tried in Boston on March 5 and 6, before Judge Dodge and a jury. The government claimed that the candy was adulterated under the national food law because it contained traces of talc. The candy involved was Easter eggs and similar candy requiring a high polish. The national food law says that candy shall be deemed to be adulterated if it contains talc. The amount of talc in the candy involved in the Boston cases was extremely small, one sample showing less than a grain of talc to a pound of candy, and whatever talc was on the candy was contained entirely on its coating. The confectioners interested in the suit took the position that the candy was not adulterated within the meaning of the law because the talc that had been used was used simply as a mechanical agent to impart a higher polish to the candy and that if any remained it was entirely on the surface of the candy and was there in such minute quantities as not to in any way impair the quality of the candy or affect its quality in any way and was not injurious to health. The government has brought a great number of cases in several parts of the country against confectioners and against confectionery on the same charges as were made in the Boston cases. The Boston cases, therefore, were regarded in the nature of test cases and for that reason the National Confectioners' Association took a part in the defense of the cases in order to get the issue settled, if possible. The confectioners admitted in the answers filed that they had used talc for mechanical purposes as mentioned above in the process of making the candy, but did not know whether or not any of the talc remained on the surface of the candy. This was one of the issues submitted to the jury. The government contended that under the law the candy was adulterated if it contained talc, no matter how small the quantity might be, even the barest trace, such as the amount on the candy involved, and that all that it was necessary for the government to do was to show the presence of talc, no matter how small the amount or whether it in any way affected the candy or not. The judge, however, instructed the jury that it was not sufficient for the jury to find merely the presence of a trace of talc, but that they must be satisfied that the candy contained some appreciable amount of talc before they could condemn it as adulterated, and in effect that the law dealt with practical questions and not mere theoretical ones. That the law was passed by reasonable and practical men for use among reasonable and practical men. The jury's verdict was that the candy was not adulterated. The government was represented by Mr. Furber, Assistant United States Attorney in Boston, and the confectioners were represented by Attorney Henry W. Beal of Boston, and Thomas E. Lannen, of Lannen & Hickey, Chicago, attorney for the National Confectioners' Association. The full charge of the judge to the jury in the case is as follows:

CHARGE OF JUDGE DODGE TO THE JURY.

"The printed forms of verdicts which will go out with you when you go out to consider this case are a little different from those you have used before. A specimen will be enough: 'The jury find that the candy eggs contained in 131 boxes are'—then there is a blank—'adulterated.' That verdict you will complete either by omitting or by inserting, according as you shall find, the word 'not' in that blank. The foreman will sign that verdict when it is agreed upon, in the usual way. There will be one verdict to be rendered in each of these three cases, and you have a form applying to each one. The only difference between the three cases, the only respect in which one differs from another, is that in case No. 395, the United States proceeds vs. ninety-six boxes of candy peaches and pears. Now for the present purposes you may treat this case as if it were a proceeding against the candy pears only. The government admits that it has nothing to object to in the peaches, and you may disregard them. You may treat this case as if it related to the pears and nothing else, and when your verdict is rendered we will see what to do with the peaches.

"This, as you have heard, gentlemen, is a prosecution under the pure food law, so-called; and we shall all agree that of all the laws ever passed by Congress it is probable that that is one of the most useful, and one which has benefited the people of this country, probably, as much as any other. There is no question that such a law should be properly enforced, just as any other law of Congress should be properly enforced. It is, nevertheless, true that that law, like all the other laws which Congress passes, is a law passed for practical purposes, to be considered by practical people,

and not to be given an unduly theoretical construction.

"The law says, as you have heard several times while this case has been on trial, that all goods in interstate commerce which are adulterated are liable to be forfeited to the United States—all goods within the act, goods which come within the pure food law. The law also says in so many words that candy is adulterated within the meaning of the law if it contains tale. There is no dispute about that. Those are the words of the law.

"The government, in seeking to have these goods declared forfeited, rests upon the mere words of the law. The government says: 'This candy had tale in it; never mind anything more, it has tale in it; therefore it is adulterated under that law.'

"Well, gentlemen, the government does not try to show you in this case that the goods are injurious to anybody. You have no such question as that before you. You are not to inquire, for any purpose in this case, whether the tale would hurt anybody or whether it would not. So far, I agree with the contention of the government counsel. The government does not try, and there is no question for you to consider, as to whether tale is injurious, or whether tale in the quantities which these government experts have described is injurious. There is no such question before you here.

"It seems to me that to say that the goods are necessarily adulterated under the law as it stands, if only any tale, no matter how little, may be found in them, is not the proper construction of the law. Such a claim might be good, undoubtedly is good, in strict logic; but does it follow that for the purposes for which this law was intended it is good? I do not think it follows that any such thing was necessarily the intent of the law when it was passed. We must suppose that the law was passed by reasonable and practical men for use among reasonable and practical men. I take on that question a little different view from that taken by the government. It is the duty of the court to instruct the jury in matters of law. Questions of fact it is the duty of the court to submit entirely to the jury. The court should not undertake to interfere with any question of fact, but questions of law are for the court, and if the court makes any mistake in ruling upon them the party against whom he rules has a perfect remedy by appeal.

"Now, I shall instruct you, gentlemen, that the government in order to prove these goods adulterated, and to be entitled to a verdict from you that they are adulterated, has the burden of satisfying you by a fair preponderance of the evidence, in the first place, that there was tale in these candies; and, in the second place, that there was something beyond a mere chemical trace of tale, that is to say, a quantity sufficient to enable you, as reasonable and practical men, to say that it was significant or important for some possible practical purpose.

"Let us take first the question, 'Was there any tale in this candy?' The government has the burden to satisfy you of that, in the first place, by a fair preponderance of the evidence. If it has failed to do that, you should find for the defendant, without going any further. On the one side you have the evidence of the experts introduced by the government. They tell you they found tale, as a result of their examination. They undertake to tell you or to estimate for you how much tale they found. Now it is for you to say how far you will believe them. You have heard them cross-examined. They have been made to detail before you the manner in which they treated these candies in their analysis, and the reasons which they have for believing that what they found in the candy was tale. All that evidence you are to consider, and consider fairly. You are to say how far you will believe it. If there is any evidence the other way, you are to consider that in the same manner. You are to say, then, which way to your minds the preponderance, the fair preponderance, of the evidence, has been.

"The witnesses for the government, as I understand them, have told you that they found in these candies, as a result of their analysis, mineral matter. They have not undertaken to claim to you that all of it was tale, at least not all of them have made that claim. There was mineral matter. Tale is mineral matter, but not all mineral matter is tale. What the government has to prove to you is, in the first place, that there was tale in these candies, and you must say whether that has been proved by a fair preponderance of the evidence or not.

"If you are so satisfied by a fair preponderance of the evidence that the candy did contain tale, I shall instruct you that it is still necessary to consider to some extent the amount of tale that there was there.

"We have been told in the course of this case that there are no substances which are chemically pure. We have been told in the course of this case that there is mineral matter to a greater or less quantity, contained in every ingredient of this candy. Gelatine enters into it, and gelatine, they tell us, contains mineral matter, a trace, a small quantity, however much it may be. Chocolate enters into it; in that we are told there is mineral matter. Sugar enters into it; in that we are told there is also mineral matter.

"In considering the quantity of a substance like this, not claimed to be poisonous, it seems to me that of a quantity so small as not to be appreciable for any practical purpose whatever, the law does not take account. Things which are entirely trifling, insignificant, unsubstantial, of no consequence for any practical purpose, as a general rule the law does not take account of. Of course, gentlemen, we are to give to this law a fair and honest construction, for the purpose of enabling it to be carried out to accomplish that which it was intended to accomplish. It is important that the law should be strictly enforced. But it does not follow from that that we are required to give the law a construction or an effect purely theoretical, as opposed to a practical construction.

"If you have been satisfied by a fair preponderance of the evidence that there is tale in these candies, I instruct you that you should also be satisfied, in order to find for the government, by a fair preponderance of the evidence, that there is in the candies a quantity of tale sufficiently appreciable to enable you, as reasonable men, to regard it as significant or important for some practical purpose. I shall instruct you, gentlemen, that it is not merely a quantity so small that all the difference it could possibly make for any purpose whatever would be only imaginary or theoretical. That is not enough to enable you to find these eggs adulterated within the meaning of this law. A mere mechanical trace, only to be detected by a skillful chemist, would not, as I shall instruct you, be sufficient.

"There must be such a quantity, at least, as you would say, supposing that were the question, you could possibly regard as enough to show on the manufacturer's part some purpose of deception. If it were so insignificant and small that you could not say, if the question of deception on the manufacturer's part were raised here, that he could possibly have been supposed to have any purpose of deception, if he used only so small a quantity as that, then I shall instruct you that there was not enough tale in this candy to justify your finding it adulterated within the meaning of the act.

"I think that the law means that there should be at least so much of the forbidden substance in this candy as you would say, if that were the question, might possibly be considered by you as enough to show a want of that extreme care expected of the manufacturer of candies, in guarding the purity of his product; and if you find that the quantity of tale was so small that, no matter what extreme care the manufacturer had to use, yet he would not be guilty of any failure whatever in that extreme care if only so much tale as that got in, then that that would not be a sufficient quantity of tale to warrant you in finding the candies adulterated within the meaning of the law.

"Now, gentlemen, it is not necessary that you should find that there was enough tale to injure or hurt any consumer of those candies, for the purpose of this case. That is not the question here. Undoubtedly it may be true that a quantity so small that it could not possibly hurt any consumer, would be within the meaning of the law, and would require you to find the candies adulterated. All that I mean to say is that, in my opinion, and I shall so instruct you, there should be at least some quantity beyond a mere chemical trace, something which you can regard as going beyond what is merely imaginary or merely theoretical."

THE VEGETARIAN OYSTER.

Oysters are most exemplary in the matter of diet. The oyster is well nigh a vegetarian, living almost exclusively on seaweed, including the minute pine pollen of the water. Smaller animals form only 5 per cent of his food. He is a methodical feeder, always dining between the hours of 12 and 2 in the afternoon. When he wants his meals he simply opens his shell and lets the water flow in through a sort of gill, which retains the food, allowing the water to run out again. It is only in frosty weather that the oyster goes off his feed. In order to protect himself as much as possible from the cold he lies with the bulging shell uppermost. In this position he cannot open his shell and must perforce go short of food. But he would sooner starve than let the cold water in to chill his delicate flesh. Bless him!—*London Chronicle*.

United States Department of Agriculture

OFFICE OF THE SECRETARY,
BOARD OF FOOD AND DRUG INSPECTION

Food Inspection Decision 139.

USE OF THE TERM "SWEET OIL."

From time to time this department has received inquiries asking whether or not it is permissible, under the Food and Drugs Act, to label cottonseed oil as "sweet oil." Investigations have shown that some samples marked "sweet oil" consist of cottonseed oil or a mixture of olive oil and cottonseed oil. A careful consideration of the subject leads to the conclusion that the only oil to which the term "sweet oil" may be correctly applied is olive oil.

It is held, therefore, that any oil other than olive oil is misbranded when sold under the name "sweet oil." It is not correct, for example, to label cottonseed oil as "sweet oil" and then elsewhere on the label to describe correctly the true character of the oil.

H. W. WILEY,
R. E. DOOLITTLE,
F. L. DUNLAP,

Board of Food and Drug Inspection.

Approved:

JAMES WILSON,

Secretary of Agriculture.

Washington, D. C., February 10, 1912.

Food Inspection Decision 140.

LABELING OF VINEGARS.

The Board of Food and Drug Inspection has given this question much consideration. A public hearing was given, a series of questions submitted to the various State food commissioners, interested manufacturers, wholesalers, retailers, and consumers, and a study of the various State laws and regulations was made, believing that these represent the general understanding of the terms by the people of those States. From the information thus obtained the board has reached the conclusion that the definitions given in Circular No. 19, Office of the Secretary, are in accordance with the facts. These are as follows:

1. *Vinegar, cider vinegar, apple vinegar*, is the product made from the alcoholic and subsequent acetous fermentations of the expressed juice of apples.

2. *Wine vinegar, grape vinegar*, is the product made by the alcoholic and subsequent acetous fermentations of the juice of grapes.

3. *Malt vinegar* is the product made by the alcoholic and subsequent acetous fermentations, without distillation, of an infusion of barley malt or cereals whose starch has been converted by malt.

4. *Sugar vinegar* is the product made by the alcoholic and subsequent acetous fermentations of solutions of sugar, sirup, molasses, or refiner's sirup.

5. *Glucose vinegar* is the product made by the alcoholic and subsequent acetous fermentations of solutions of starch sugar or glucose.

6. *Spirit vinegar, distilled vinegar, grain vinegar*, is the product made by the acetous fermentation of dilute distilled alcohol.

Several questions regarding these definitions have been raised and after investigation the board has reached the following conclusions:

Meaning of the term "vinegar."—While the term "vinegar" in its etymological significance suggests only sour wine, it has come to have a broader significance in English-speaking countries. In the United States it has lost entirely its original meaning and when used without a qualifying word designates only the product secured by the alcoholic and subsequent acetous fermentation of apple juice.

"Second pressings."—It is held that the number of pressings used in preparing the juice is immaterial so long as the pomace is fresh and not decomposed. The practice of allowing the pomace from the presses to stand in piles or in vats for a number of days, during which time it becomes heated and decomposed, and then pressing, securing what is ordinarily called "second pressing," in the opinion of the board produces a product which consists in whole or in part of a filthy and decomposed material and is therefore adulterated.

Vinegar from dried-apple products.—The product made

from dried-apple skins, cores, and chops, by the process of soaking, with subsequent alcoholic and acetous fermentations, of the solution thus obtained, is not entitled to be called vinegar without further designation, but must be plainly marked to show the material from which it is produced. The dried stock from which this product is prepared must be clean and made from sound material.

Addition of water.—When natural vinegars made from cider, wine, or the juice of other fruits are diluted with water, the label must plainly indicate this fact; as, for example, "diluted to — per cent acid strength." When water is added to pomace in the process of manufacture, the fact that the product is diluted must be plainly shown on the label in a similar manner. Dilution of vinegar naturally reduces, not only the acid strength, but the amount of other ingredients in proportion to the dilution, so that reduced vinegars will not comply with the analytical constants for undiluted products; but the relations existing between these various ingredients will remain the same. Diluted vinegars must have an acid strength of at least 4 grams acetic acid per 100 cubic centimeters.

Mixtures of vinegars.—As different kinds of vinegar differ in source, flavor, and chemical composition, mixtures thereof are compounds within the meaning of the Food and Drugs Act, and if they contain no added poisonous or other added deleterious ingredients, will not be held to be misbranded if plainly labeled with the word "compound," together with the names and proportions of the various ingredients.

Addition of boiled cider and coloring matter.—The Food and Drugs act provides that a product shall be deemed to be adulterated if it be mixed, colored, powdered, coated, or stained in a manner whereby damage or inferiority is concealed; and, in the opinion of the board, the addition of coloring matters, boiled cider, etc., to vinegar, wine vinegar, and the other types of vinegar, or mixtures thereof, is for the purpose of concealing damage or inferiority or producing an imitation product. In the first instance, the use of such products is an adulteration and therefore prohibited. Products artificially colored or flavored with harmless ingredients in imitation of some particular kind of vinegar will not be held to be misbranded if plainly labeled "Imitation vinegar" in accordance with the provisions of the law.

Mixture of distilled and sugar vinegars.—The product prepared by submitting to acetous fermentation a mixture of dilute alcohol (obtained, for example, from molasses by alcoholic fermentation and subsequent distillation) and dilute molasses, which has undergone alcoholic fermentation, is not "molasses vinegar" but a compound of distilled vinegar and molasses vinegar; such mixtures, however, must contain a substantial amount of molasses vinegar and not a small amount for the purpose of coloring the distilled vinegar. The molasses used must be fit for food purposes and free from any added deleterious substances.

Acetic and diluted.—The product made by diluting acetic acid is not vinegar and when intended for food purposes must be free from harmful impurities and sold under its own name.

Product obtained by distilling wood.—The impure product made by the destructive distillation of wood, known as "pyroligneous acid," is not vinegar nor suitable for food purposes.

Acid strength.—All of the products described above should contain not less than four (4) grams of acetic acid per one hundred (100) cubic centimeters.

H. W. WILEY,
R. E. DOOLITTLE,

Board of Food and Drug Inspection.

Approved:

JAMES WILSON,

Secretary of Agriculture.

Washington, D. C., February 12, 1912.

Food Inspection Decision 141.

THE LABELING OF MARASCHINO AND MARASCHINO CHERRIES.

The question of the proper labeling of the products designated as "Maraschino Cherries," "Cherries in Maraschino," "Bigarreau au Masasquin," etc., has been presented to the Board for consideration; and after due investigation and examination of the evidence secured, the Board is of the opinion that the term "Maraschino Cherries" should be applied only to the marasca cherries preserved in maraschino.

Maraschino is a liqueur or cordial prepared by process of fermentation and distillation from the marasca cherry, a small variety of the European wild cherry indigenous to the Dalmatian Mountains. Liqueurs or cordials prepared in imitation of maraschino with artificial flavors or otherwise

will not be held to be misbranded if plainly labeled "Imitation" in some manner to show their true character.

In considering the products prepared from the large light-colored cherry of the Napoleon Bigarreau, or Royal Anne type, which are artificially colored and flavored and put up in a sugar sirup, flavored with various materials, the Board has reached the conclusion that this product is not properly entitled to be called "Maraschino Cherries," or "Cherries in Maraschino." If, however, these cherries are packed in a sirup, flavored with maraschino alone, it is the opinion of the Board that they would not be misbranded, if labeled "Cherries Maraschino Flavor," or "Maraschino Flavored Cherries." If these cherries are packed in maraschino liqueur there would be no objection to the phrase "Cherries in Maraschino." When these artificially colored cherries are put up in a sirup flavored in imitation of maraschino, even though the flavoring may consist in part of maraschino, it would not be proper to use the word "Maraschino" in connection with the product unless preceded by the word "Imitation." They may, however, be labeled to show that they are a preserved cherry, artificially colored and flavored.

The presence of artificial coloring or flavoring matter, of any substitute for cane sugar, and the presence and amount of benzoate of soda, when used in these products must be plainly stated upon the label in the manner provided in Food Inspection Decisions Nos. 52 and 104.

The same principle applies to the labeling of cherries put up in sirup flavored with crème de menthe or other flavors.

H. W. WILEY,
R. E. DOOLITTLE,
F. L. DUNLAP.

Board of Food and Drug Inspection.

Approved:

JAMES WILSON,

Secretary of Agriculture.

Washington, D. C., February 17, 1912.

Food Inspection Decision 142.

SACCHARIN IN FOOD.

The following decision which relates to the use of saccharin in food will not go into effect until the 1st of April, 1912, the month of March being given to interested parties so as to arrange their business and take such steps as they deem proper.

James Wilson,

Secretary of Agriculture.

Washington, D. C., March 1, 1912.

After full consideration of the representations made in behalf of the manufacturers of saccharin at the hearing before us and of the briefs filed by their attorneys, as well as the briefs filed, at our request, by officers of the Department of Agriculture, we conclude that the use of saccharin in normal foods, within the jurisdiction of the Food and Drugs Act, is a violation of law and will be prosecuted.

It is true that the Referee Board did not find that the use in foods of saccharin in small quantities (up to 0.3 gram daily) is injurious to health. However, the Referee Board did find that saccharin used in quantities over 0.3 gram per day for a considerable period is liable to disturb digestion, and the Food and Drugs Act provides that articles of food are adulterated which contain any added poisonous or other added deleterious ingredient which may render them injurious to health.

The Bureau of Chemistry of the Department of Agriculture reports that saccharin has been found in more than fifty kinds of foods in common use. It is argued, therefore, that if the use of saccharin in foods be allowed, the consumer may very easily ingest, day by day, over 0.3 gram, the quantity which, according to the findings of the Referee Board, is liable to produce disturbances of digestion. On the other hand, it is claimed by the manufacturers that the sweetening power of saccharin is so great that, in a normal dietary, the amount of saccharin ingested daily would not exceed 0.3 gram, the amount found to be harmless by the Referee Board.

However this may be, it is plain, from the finding of the Referee Board, that the substitution of saccharin for sugar lowers the quality of the food. The only use of saccharin in foods is as a sweetener, and when it is so used, it inevitably displaces the sugar of an equivalent sweetening power. Sugar has a food value and saccharin has none. It appears, therefore, that normal foods sweetened with saccharin are adulterated under the law.

In making this decision we are not unmindful of the fact that persons suffering from certain diseases may be directed by their physicians to abstain from the use of sugar. In

cases of this kind saccharin is often prescribed as a substitute sweetening agent. This decision will not in any manner interfere with such a use of saccharin. The Food and Drugs Act provides that any substance which is intended to be used for the prevention, cure, or mitigation of disease is a drug, and a product containing saccharin and plainly labeled to show that the mixture is intended for the use of those persons who, on account of disease, must abstain from the use of sugar, falls within the class of drugs and is not affected by this decision.

The Secretary of the Treasury dissents.

JAMES WILSON,

Secretary of Agriculture.

CHARLES NAGEL,

Secretary of Commerce and Labor.

Washington, D. C., February 29, 1912.

THE CASE OF THE GRAIN MEN.

The ruling of the Bureau of Chemistry in regard to the interstate shipment of so-called off-grade grain, heated or fermented corn and sulphur-treated oats, announced early in February, and which created a panic in the entire grain trade, has been suspended by order of Secretary Wilson of the Department of Agriculture and Secretary Nagel of the Department of Commerce and Labor.

The developments which culminated in the situation are as follows: The grain trade has been considerably exercised for some time over the rules laid down by the court in the Hall-Baker grain case. The uncertainty as to the sufficiency of grading rules and state and market inspections led to the Council of Grain Exchanges appointing a committee to arrange a hearing with the pure food board to find out just how the pure food law applies to the grain trade. In going to Washington the grain people had no other idea than to get the question of grading and inspection settled. In fact, at that time, they did not realize that there was any other very important feature of the grain trade on which the pure food law might bear.

A curious feature of the whole situation is that the grain people got practically all they went for, although in the end they were given an extra dose on which they had not bargained at all. In going over the grading proposition the members of the Board of Food and Drug Inspection indicated that in the enforcement of the pure food law they would accept the grades of the various exchanges of the country as the standards for applying the pure food law to the shipments of grain entering interstate commerce. For instance, if a carload of wheat was shipped from Milwaukee to New York as No. 2 red, the facts upon which it would determine whether or not the shipment actually was No. 2 red would be the Milwaukee grade covering this commodity. The board, however, would not accept the inspection of any market or state as conclusive evidence of any shipment reaching the required grade. If facts are discovered concerning any shipment, although officially passed as of a certain grade, which tend to disprove this claim, the board threatened to institute proceedings for misbranding or adulteration, or both, as the case may be.

In making clear its attitude on this subject, the board added a couple of other ideas, one of which fell like a bomb shell among the grain men in attendance at the hearing. The first was that the shipment of heated or damaged grain, which in the process of decomposition has reached a point making it injurious as a food for man or animal, would be prevented and every shipment discovered prosecuted under the pure food law. This ruling was intended to cover a quantity of damaged corn, wheat, and, for that matter, practically all grains which have been going into consumption as feed after reaching a certain stage of decomposition. The board stated, however, that it would not make a hard or fast rule for the guidance of shippers in this matter, as each particular case will have to stand on its own merits. The mere fact that grain is salvage or heated or damaged would not necessarily mean that it is unfit for food purposes, but decomposition may develop a condition making the sale of such commodities in interstate commerce unlawful.

COLD STORAGE BILL IN MARYLAND.

A cold storage regulation measure has been introduced in the Maryland Legislature by Delegate Newman, of Baltimore. It limits the storage of meats to thirty days, poultry to twenty-five days, fresh fish to five days, butter and eggs to twenty days. A food commissioner to be appointed by the State Board of Health is provided for in this bill to enforce this measure.

Survey of the Food and Drug World

Bill to Establish Apple Standards.

Representative Sulzer, of New York, has offered a bill in Congress to establish a standard barrel and standard grades for apples when packed in barrels, which was to-day referred to the Committee on Coinage, Weights and Measures. The first section says that the standard barrel for apples shall be of the following dimensions: "Length of stave, twenty-eight and one-half inches; diameter of head, seventeen and one-eighth inches; distance between heads, twenty-six inches; circumference of bulge, sixty-four inches outside measurement, representing, as nearly as possible, seven thousand and fifty-six cubic inches."

Section 2 provides that the standard grades for apples when packed in barrels which shall be shipped or delivered for shipment interstate or foreign commerce, or which shall be sold or offered for sale within the District of Columbia or the territories of the United States, shall be as follows:

Apples of one variety, which are well grown specimens, hand picked, of good color for the variety, normal shape, practically free from insect and fungus injury, bruises and other defects, except such as are necessarily caused in the operation of packing, or apples of one variety which are not more than 10 per centum below the foregoing specifications, shall be "United States standard size A," if the minimum size of the apples is two and one-half inches in transverse diameter; or "United States standard size B," if the minimum size of the apples is two and one-fourth inches in transverse diameter; or "United States standard size C," if the minimum size of the apples is two inches in transverse diameter.

Sanitary Work of the Newark Inspectors.

More than 1,200 reports showing the sanitary condition of as many stores and other places in Newark, N. J., where foodstuffs are sold, are in possession of Health Officer David D. Chandler.

These reports represent the results of the completion of the first stage of the big task of cleaning up the stores and other places where foodstuffs are sold, undertaken by the committee on foods and drugs of the Board of Health.

The present work of the public health department, with respect to foodstuffs, is being directed toward the close regulation of all places where edibles of whatever kind are sold. The field work is being directed by Chief Inspector Samuel G. Sharwell, of the food and drug department.

The efforts are the growth of the special activities manifested by the department in response to the exposures resulting from the investigation of the conditions attending the milk supply of this city.

The first special inspection of the whole city is about completed. It has covered groceries, restaurants, confectionery stores, delicatessen stores, butcher shops, stationery and other stores partly devoted to the retailing of candies and other edibles, bakeries, oyster houses and places where articles are used for human consumption are offered for sale.

Comparative Food Value of Milk and Beer.

The Iowa Dairy and Food Commission has issued the following bulletin on the comparative food values of milk and beer:

"This department has had numerous inquiries as to the comparative value and cost of milk with other food products and occasionally an inquiry as to the relative value and cost of milk and beer. Owing to the season of the year fast approaching when large quantities of both milk and beer are consumed, I deem it of interest to give the comparison between these two products at this time.

"The average price of a quart of milk in bulk is eight and one-third cents. A quart of beer in bulk, when the purchaser furnishes the pail, costs ten cents or, if purchased by the glass, 20 cents. An equivalent amount of proteid (nitrogenous) material in the form of milk (four ounces) costs one cent and in the form of meat about one and one-half cents, while an equivalent amount of carbohydrates (starch and sugar) in the form of bread (four ounces) costs about one and one-quarter cents. Assuming that the alcohol of the beer is entirely utilized, and that it does not harm any of the normal processes, we find that in calculated food value each quart of beer costing ten cents is equivalent to twenty-three ounces of milk costing six cents. It will, therefore, be

seen that beer, when purchased in bulk, costs 66 per cent more than milk or 233 per cent more when beer is purchased by the glass."

A Scotch Short Weight Case.

An interesting case was decided in Dunfermline, Scotland, in December, relating to the methods adopted by various wholesale grocers throughout Great Britain of including the weight of paper in which half-pound tea packages were wrapped as part of the weight of tea sold. The defense was that from long-established custom they were entitled to sell tea in this way, the bags in which the tea was contained being as light as was practicable to make them.

The court held that while the charge against the defendants did not necessarily infer personal dishonesty, the tea was not weighed in the presence of the buyer and the tea in the packages was slightly short of the required weight and he must find both the defendants guilty. One was a co-operative society and the other a shop-keeper in this district. The co-operative society has accepted the judgment of the court, while the shopkeeper has appealed from the decision of the sheriff's court.

If the court's decision is sustained it means that hereafter tea dealers must sell full weight tea exclusive of the weight of the package.

To Prevent Sale of Fake Vinegar.

Strong efforts are being made by the authorities of Connecticut to prevent the sale of fake vinegar in or from that State. Dairy and Food Commissioner H. F. Potter is quoted as saying that, as an outcome of his investigations into the composition and labeling of vinegars, the Department will bring many prosecutions. In these cases the greatest part of the vinegar is manufactured outside of the State. Much adulterated vinegar has been found. Mr. Potter said: "Formerly it was very easy for a vinegar manufacturer to pass it off on the public for pure vinegar. Until recently it has been very hard work for any of the pure food chemists to detect the adulteration. But the chemists under the Federal Government have been making a special study in the adulteration of vinegar, and there are several of them fully as expert in the manipulation of vinegar as the chemist employed by the vinegar manufacturer, who has made a specialty of analysis and the manipulation of vinegar."

Minnesota Canneries Increase Output.

The 1911 output of canned corn in Minnesota was almost double that of 1910, according to statements compiled by the Minneapolis Association of Commerce from reports of the federal census. In 1911 9,086,600 cans of corn were packed by Minnesota canneries, as against 4,852,650 in 1910. This shows an increase of 87 per cent in the output of canned corn last year.

According to the census reports, the increase in the value of the products of the canning factories of the country, as a whole for the five years ending 1909, was 20 per cent. This compares with the 76 per cent increase made by Minnesota in the past year.

The statement also shows that there were 343,200 cans of peas packed last year, compared with 318,400 the year before. Beets jumped from 1,000 to 6,000 cans, and sauerkraut from 28,000 to 108,000 cans.

Germany May Take American Meat.

Advices from Germany following the Socialist victory in the recent election which gives them the largest representation of any single party in the Reichstag, were to the effect that already the German government was considering removing the ban on refrigerated and frozen meat. It is known that this is one of the chief demands of the Socialists in their "immediate action" programme, and as there is widespread discontent over meat prices throughout the empire, it is not considered unlikely that if he can get a fair bargain in votes for his greater navy budget the Kaiser may consent to meat importations with no more serious restriction than England has. The effect of such action by Germany would be to stimulate beef exports from this country, of course, and in large quantities undoubtedly, but that Argentine meats

would also seek that market is unquestioned. There is no basis on which to figure the demands and the ultimate domestic situation.

To Reveal Details of Business.

Claiming a desire to prevent, if possible, a monopoly in the necessities of life, and to show to what extent the cost of living is due to large profits made by dealers, Assemblyman Thomas E. Coleman, of New York, introduced a bill at Albany, on March 5th, requiring all corporations, not common carriers, selling or delivering butter, eggs, milk, bread, meat, coal and ice, to file annual statements with the Secretary of State. The statements are to go into the amount of stocks and bonds issued, the net income and the fixed charges, dividends declared and the amounts added to surplus. The filing of a false or fraudulent report is made a misdemeanor, and failure to file such a report will make the corporation liable to a fine of \$5,000.

Canada May Bar American Potatoes.

Canada is said to be about to put up the bars against potatoes from the United States, fearing the dread black wart. The "wart" does not exist here but there is no quarantine law which would keep infected potatoes from Europe out of American ports, whence they might make their way into Canada.

For this reason the Department of Agriculture is particularly anxious to have Congress pass at this session a bill already introduced which would regulate the importation of nursery stock and establish a strict quarantine against plant diseases and insect pests. Similar bills have been defeated a number of times but Government officials said today that they thought the measure would pass this year. Nurserymen, it is understood, have withdrawn their opposition, several slight changes in the bill having made it meet their ideas.

Large Potato Exports From Scotland.

Exceptionally large shipments of Scottish potatoes through consignments to New York are being made through the Dunfermline consulate. Last year's large Scottish crop was in excess of the home demand, while the short American crop is the cause of the present unusual shipments. Over \$10,000 in value of potatoes have been invoiced from here during the past few days, and it is said over \$100,000 in value have been shipped from other parts of the country to New York recently. The finest Scotch potatoes are selling at \$15.82 per long ton in bags of 168 pounds each, exclusive of the cost of bags and cost of transportation. The retail price in Dunfermline at this date is \$17.84 to \$12.09 per long ton.

Rye Bread in Europe.

The rye breads baked in Europe are not appetizing looking if compared with our wheat bread. In Germany rye flour is ground finely, and the fresh-baked bread is quite spongy. There no one eats rye bread the day it is baked, but families buy four-pound loaves and keep them three or four days. The Russians bake rye bread out of coarse flour. It is often poorly baked and sour, but the peasants like it that way and eat it with salt. The rye and oat bread baked in Norway, Sweden and Finland varies in size from a dinner plate to eighteen or twenty inches in diameter. This bread is baked in thin, flat cakes with a hole in the middle, and is strung from a rafter in the cottage and allowed to hang in the smoke until it is eaten. This bread is hard and practically all crust. Once a person gets to appreciate rye bread the taste for white bread is apt to leave, and the ordinary baker's bread of this country is apt to seem tasteless.

Value of Iowa's Dairy Products.

Twenty-five million dollars' worth of creamery butter, as much dairy butter, and \$3,000,000 worth of ice cream is about the wealth created in the state by the dairy cow in the last year.

State Dairy Commissioner Barney said at the recent state convention of buttermakers at Mason City that this amount can be increased fully \$37,500,000 a year by weeding out poor milk cows and using pure bred sires.

Pickle Market Strong in West.

Advices from points in the middle west describe the situation in the pickle market as very strong. It appears that some of the largest concerns have more orders than they can take care of at the present time. This is the result of last summer's torrid weather, which cut short the cucumber crop in several of the western states and in part of the southwest. With some of the picklers prompt handling of the orders

sent in to them is prevented by lack of capacity, but with some of the others it is due to their not having the stock. With a good demand also the feeling in the pickle trade in the west, late advices say, is firm and prices may work higher later on.

Potato Exchange Organized in Maine.

The Maine Central Potato Exchange of Brunswick has been organized at a meeting attended by representative potato growers from several towns in the vicinity. It is organized for the purpose of buying, selling and handling of produce and in general to co-operate in helping the farmers secure better markets.

The exchange is organized as the result of the activity of the State Agricultural Department. The officers are: William T. Guphill, of Topsham, President; William S. Rogers, Secretary and Treasurer; Frank S. Adams, James K. Estabrook and L. H. Lamoreau, Directors.

Philadelphia Abattoir Permits.

The Board of Health of Philadelphia, Pa., has adopted a regulation that hereafter no permits for the establishment of slaughter-houses in new locations shall be granted until after a committee of the board shall have inspected such site and recommended the same as suitable with the approval of the board. There are about 175 slaughterhouses in the city, of which 25 transact interstate business and are under federal inspection. Supervision of the remaining 150 is exercised by the Bureau of Health.

Rule as to Recovery of Alcohol.

Internal Revenue Commissioner Royal E. Cahill, in reply to inquiries by the National Wholesale Druggists' Association, in regard to the effect of the decision of the United States Court of Appeals, which maintained that recovered alcohol was subject to taxation, stated that the rule long in vogue that "special tax is not required for the recovery of alcohol used in the manufacture of bona fide medicines for re-use in such manufacture" was not to be modified, but that the decision of the court would hold only in regard to the recovery of alcohol from those products intended for use as food or beverage, and not as medicine, flavoring extracts, etc.

Twenty-four Kinds of Native Wines.

New York, Feb. 27.—Twenty-four kinds of American wines were obtained for the recent annual banquet of the American Wine Growers' Association, which brought leaders in the industry from all parts of the United States to New York. Congressman Kahn of California and Attorney-General Carmody of New York were the principal speakers.

The Delicate Appetite of the Eskimo.

What would some jaded epicures give for such an appetite as this:

Six Eskimo men in three hours ate: Seven hares, weighing ten to fourteen pounds each; one seal; one bucketful of dried walrus, put up for dog food; two large cups of tea each; four biscuits each; seal and hare meat eaten raw.

One Reason for the High Cost of Living.

The New York State Food Investigating Commission has developed the information that one reason for the high cost of living in New York City is the heavy charge for trucking of food products from railway and steamship terminal to the retailers, and the inadequate facilities for handling goods at terminals. Cases where trucks waited three and four hours for loads were shown in the testimony of express and trucking companies' representatives.

A New Banana Canning Process.

A Japanese confectioner in Tainan, South Formosa, claims to have discovered a process by which the banana may be canned. He has interested several wealthy Japanese, and a \$100,000 company has been organized to build two factories, in Taihoku and in Tainan. As canned or conserved bananas have been very unsatisfactory, the new process in Formosa will be watched with much interest.

Retail Grocers Will Meet at Oklahoma City.

Announcement is made that the fifteenth annual convention of the National Association of Retail Grocers will meet in Oklahoma City, Okla., from April 22 to April 25. The Skirbin Hotel has been designated as headquarters for the delegates. An asparagus banquet will be held at the Lee-Huckins Hotel.

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DR. WILEY RESIGNS.

WASHINGTON, March 15, 1912.

Dr. Harvey W. Wiley has resigned the office of Chief of the Bureau of Chemistry, Department of Agriculture.

THE ANTI BENZOATE CULT.

Salt, the simple combination of chlorine and sodium, is not eaten at all by many human beings and a still greater number of animals. Its wide-spread use in civilized lands is due to custom, habit, education. We become used to it—we demand it. It has two uses: condimental and preservative. To put it on food just before eating, sprinkling it from a shaker, is a wide-spread habit, but is it a useful one? Salt is an anti-septic, a preservative and a poison.

Often on a bottle of catsup will be read the statement that the contents of the bottle are composed of tomatoes, onions, garlic, salt, vinegar, sugar and spices. The four last-named ingredients are preservative as well as condimental. If the catsup is to be left uncorked for any period after being originally opened for use, these preservatives must be present in quantities that will have a decided effect on the digestion. The acetic acid in the vinegar is likely to be present in dangerous quantities. Salt, likewise, and spices. Some makers of catsup have been using for a good many years a substitute for part of the sodium chloride and acetic acid, both admittedly inimical to digestion, in sodium benzoate, an article having less action on the digestive function in proportion to its preservative effect on the vegetable or animal matter to which it may be added. In fact, sodium benzoate is a much less dangerous element in foods than common salt, and its use by persons suffering from acid stomach, a form of over-fermentation, has much the same result as the use of sodium bicarbonate.

Sodium benzoate came into use first as a preservative in food products following the incorporation of a description of its properties in an edition of Thorp's Dictionary of Applied Chemistry as far back as twenty-five years ago. It was of German origin, and French chemists fought its use presumably on patriotic grounds, because France had been dragged at the chariot wheels of the country across the Rhine some years before. In the adoption of their attitude toward the new preservative, a good many American chemists followed the prejudices of their French brethren, be-

cause at that period Louis Pasteur was a great white light in chemistry and particularly in bacteriological chemistry. In this country the patriotic violence of the feelings of French chemists toward a German discovery was lost sight of, and we imported only the illogical prejudice without the concomitant reason for it. This is *opera bouffé*, but it is also history. The history of scientific progress in chemistry has been a history of the combating and overthrow of prejudices and the explosion of theories which the conclusions of research had been warped to fit. When research and reason meet, always, or nearly always, theories having no basis in fact have been overthrown. But theories have had always this advantage, that they came first, and the theories of the danger in the use of a new preservative like benzoate of soda have persisted and much work passing as research has been done in support of these theories. Prejudice dies hard.

Let us go back to first principles and consider that salt is poisonous, acetic acid is deadly, spices and essential oils are irritant poisons to be safely used only in small quantities, that saltpetre has an injurious effect on the kidneys, and that in the wide range of preservatives benzoate of soda has demonstrated that it is the least dangerous and the most useful of them all. We omit to discuss borates and salicylates, because they are not properly under discussion as not usable in this country legally. A discussion of the use of preservatives need only include those that are legally usable. Outside of sodium benzoate and saltpetre, all the preservatives mentioned have a condimental value, and so their use is admissible on that ground. There is really no reason to object to their use in any event, if they are used in moderation. We cannot, because of education and habit, eat all of our food utterly bland and without additional elements that contribute to the taste. Much food that is prepared for the table would not be eaten if it were not prepared with salt, vinegar, spices or sugar, or combinations of them. And it is well to observe that all highly seasoned food is eaten only in small quantities, so that much of the danger of ill effects from eating food overloaded with condimental preservatives is avoided.

If, however, sodium chloride, acetic acid, essential oils and spices were to be tried on their merits as preservatives alone, they would be found guilty of much more aggravated offenses than sodium benzoate. A study of them by a competent scientific body to determine their effects on the health in the quantities ordinarily consumed would bring out facts that would startle humanity. We have been using them from immemorial times, and only desultory attacks have been made on them. Prejudice has been in their favor, moreover, and education and habit have done the rest. They are firmly rooted in popular favor.

Not so benzoate of soda. The groundwork of enmity to this preservative was the original prejudice of the French chemists for a German product. Like the houn' dawg, it has been kicked around ever since. It is only partially accepted in America. It is tolerated, but its presence must be declared on the label of any food product into which it enters. There is a cult of anti-benzoatists. The preponderance of opinion in this country is in favor of the acceptance of sodium benzoate in food products where a preservative is essential. But there is a persistent propaganda against its use, and very artful means are used to keep the propaganda alive. In some cases, the methods used may be accepted as honorable and well-meant, but in the majority of instances the anti-benzoate propaganda is

promoted by means that would fall into discredit among a band of Sicilian brigands.

Commercial greed is largely responsible for the continuation of sentiment unfavorable to the use of sodium benzoate. To make the non-use of it appear commendable, it must be condemned, and where truthful condemnation cannot be made, falsehood and epithet step in. The same methods could not get the same result for salt, spices or acetic acid, because these are well known. People generally do not know what benzoic acid and its salts are, so it is easy to declare that they are dangerous, poisonous and unhealthful and secure ready acceptance of such statements. Commercial greed is here indicated pretty plainly. No other interest would be served by so palpable a perversion of fact.

It becomes necessary, then, in the course pursued by commercial greed in its efforts to destroy or impair the markets of competitors, to inspire, as a means of bolstering up the ordinary advertising or press bureau propaganda, official pronouncements that will coincide with the advertising and press bureau statements. These official pronouncements proceed from several sources—one, the honest critic of or disbeliever in the merits of benzoate of soda, another, the partially convinced official who prefers to cling to prejudice or who may be kept in line by considerations of personal or political favor, and a third, the man in a position to endow his statements with official weight, who condemns sweepingly with few compunctions and either with or without knowledge that what he does is utterly wrong.

In this last-named class we unhesitatingly place the gentleman from Colorado. Bear in mind that previous to his appointment as Drug Inspector of his state by Governor Shafroth, Mr. Ford was a user in his drug store of fruit juices plainly labeled as being preserved with benzoate of soda, and then reconcile, if possible, that fact with the apparent enmity displayed in his recent published utterances. Some months back, Mr. Ford was checked by manufacturers using sodium benzoate as a preservative in a statement printed in the Colorado State Board of Health's bulletin to the effect that the article was commonly made from the urine of herbivorous animals. This statement he retracted in a later bulletin, but he goes to greater length in publishing this false statement in a paper published over his signature in the *Rocky Mountain Druggist*. In this paper he says:

This writer erroneously stated in a former issue of the bulletin of the Colorado State Board of Health that "artificial benzoic acid, one of the legalized adulterants of food, is made almost exclusively from the urine of horses and other herbivorous animals, and always carries the aroma peculiar to its source." It should read, "formerly so made, but now superseded by a benzoic acid obtained by the chlorination of toluene, which though not so pure chemically, as that obtained from urine, is preferred because furnished at about half the price."

All text books treating of this subject and published during the past thirty years give this information, except as to the reason for preference being given to the coal tar synthetic. If there be any person so unsophisticated as to imagine the manufacture of a few tons of benzoic acid from urine to be a chemical curiosity, let him go to the corner drug store and ask to be shown.

If this statement were true, the drug stores of Denver would be condemned as public nuisances. The statement bears evidence of its falsity on its face, and Mr. Ford would be in no position to verify it if he were called upon to do so, and he knows it.

The most numerous of the statements concerning

benzoic acid and benzoate of soda have to do with its alleged use in covering up defects in the materials used in food manufacture. It is a well-known fact that salt and sugar can be and are used for just such purposes as it is charged benzoate of soda is used for, and much more successfully, because salt and sugar, with vinegar and spices, all antiseptics, will so completely disinfect and deodorize rotten material, on account of their overpowering odor and taste, as to conceal from the physical senses any decomposed and putrid condition much more effectually than mere benzoate of soda, which has very little taste and no odor. But where putrid and decomposed goods masquerading as fresh and wholesome are found in connection with benzoate of soda and sugar, salt, vinegar and spices, the masking of the bad condition is attributed to benzoate of soda by those officials who, through ignorance, prejudice or mendacity, wish to make that appear to be the real condition.

Professor Ladd of North Dakota belongs to the second class of officials mentioned who issue bulletins condemning sodium benzoate. Professor Ladd possesses some ability as a chemist and an executive, and he doubtless is familiar with all the facts set forth above as to the actual effects of benzoic acid and its salts. He is a close follower of Dr. Wiley and probably knows Dr. Wiley's limitations as a scientist. His reasons for his course upon this subject will doubtless bear scrutiny. He is simply in that school of scientific or pseudo-scientific men who will not admit an error. This is the bull-head school. One of Professor Ladd's recent bulletins is as follows—carrying out the idea of the masking of decomposed and putrid material being due to the use of benzoate of soda, despite the fact that nearly every other form of preservative has been used:

The standard adopted by the United States Bureau of Chemistry for the examination of catsup requires that it shall contain not more than 25 per cent of microscopic fields as examined showing mold filaments; not more than 25 yeasts and spores in 1-60 cubic centimeter; and not over 25,000,000 bacteria per c. c. Provisionally this standard has been accepted and followed by this department.

The standard for catsup is as follows:

"Catsup is the clean, sound product made from the properly prepared pulp of clean, sound, fresh, ripe tomatoes with spices and with or without sugar and vinegar."

With the above as a standard many catsups have been condemned as having been made from decayed, decomposed, rotten, and filthy material unfit for human food. It is also in this class of products that is found more generally benzoate of soda as a preservative agent, and the presence of benzoate of soda has effectively concealed and made salable materials which could not otherwise have been disposed of in an article of food.

Observe that the mold filament and bacteria standards are those of the United States Bureau of Chemistry—the Wiley standards—and the whole story is explained. There is no eye in which Dr. Wiley looms so large as in that of Professor Ladd.

In the class of honest but mistaken official critics of benzoate of soda is Professor R. E. Rose, State Chemist of Florida. The other honest but mistaken critics are lay rather than expert. They are readers of the widely published newspaper "dope"—the press agent matter that villifies benzoate and all who defend it or try to promulgate the truth about it, from the Referee Board of Consulting Scientific Experts down to the AMERICAN FOOD JOURNAL. Professor Rose has recently issued a bulletin on benzoate of soda that makes one think of the boy whistling to keep up his courage in the dark. It is a rather readable bulletin

from any standpoint, but its whole value as an argument is destroyed when we reflect that the Florida Legislature at its last session passed a law in which "benzoic acid and benzoates" were placed among the prohibited preservatives, and the bulletin is prepared not so much as an argument against the use of these preservatives as an argument in favor of the law. But its effect with the unthinking public will be the same, and however much this particular bulletin defeats itself as a critical study of benzoate of soda, it will probably be widely used as an anti-benzoate document, by the simple process of quoting parts instead of the whole of it. Incidentally, it is largely made up of quotations. The American Medical Association is quoted, as well as Dr. Wiley. A number of cases are cited in which benzoate of soda is shown to be in condemned foodstuffs. And, also incidentally, Professor Rose takes the position that benzoate of soda is not as much of a preservative as other opponents of its use believe. So there is a disagreement among the doctors.

Dr. Wiley is the head and front of the anti-benzoate cult. But for him there would be no cult. There would be sporadic colonies of anti-benzoatists, but no general movement. And Dr. Wiley is not in the position he occupies so much for his qualities of leadership as for the fact that the greedy commercialists took him up into a high mountain and he fell. He became a blind, bigoted partisan and because that is his only strength he became an apparent leader in the cult, but more truly a head and front behind which commercial greed has very effectually hidden.

INVESTIGATE.

11. And Haman told them of the glory of his riches, and the multitude of his children, and all the things wherein the king had promoted him, and how he had advanced him above the princes and servants of the king.

12. Haman said, moreover, Yea, Esther the queen did let no man come in with the king unto the banquet that she had prepared but himself; and tomorrow am I invited unto her also with the king.

13. Yet all this availeth me nothing, so long as I see Mordecai the Jew sitting at the king's gate.

14. Then said Zeresh his wife and all his friends unto him. Let a gallows be made of fifty cubits high, and tomorrow speak thou unto the king that Mordecai may be hanged thereon; then go thou in merrily with the king unto the banquet. And the thing pleased Haman; and he caused the gallows to be made.

Esther V, 11-14.

6. And Esther said, The adversary and enemy is this wicked Haman. Then Haman was afraid before the king and the queen.

10. So they hanged Haman on the gallows that he had prepared for Mordecai. Then was the king's wrath pacified.

Esther VII, 6 and 10.

Doc Wiley objects to the public or even to members of Congress knowing anything about what he is doing in connection with enforcing the pure food law, unless such information is first censored by him. And so, when we sent a letter to members of Congress urging a real investigation of Wiley, so that Congress and the public might know how he has been enforcing the law, and inclosed an illustration for the edification of readers, Doc Wiley and his publicity agents set up a howl about a "pipe line" and a "leak" in the Department.

The illustration in question was a copy of a public record, to-wit, the official action of Wiley's Board of Food and Drug Inspection in a lead poison case, which record had been requested of Secretary Wilson by a member of Congress.

And Doc Wiley objects!

Well may he object, for if many more such illustrations come to light, the public, and particularly Congress, will learn to know how it has been hoodwinked by Wiley in the past; and how Wiley has been using the law to help those interests he wants to help, and to injure those interests he wants to injure.

Of course he cannot do this except by taking contradictory and inconsistent positions from a scientific point of view; but, as most of his associates in the Bureau of Chemistry placidly accept his censorship, he is usually successful in performing these scientific somersaults, and only occasionally strikes a snag.

President Roosevelt suspected Doc Wiley of "in and out running" on the scientific field, and appealed to the presidents of the leading colleges of the United States for a trustworthy scientist to be put in the Bureau of Chemistry as an associate of Wiley, to make him run straight scientifically. The man best recommended was Dunlap. So Dr. Dunlap was selected for the position by President Roosevelt.

Dr. Dunlap has not always agreed with Doc Wiley on scientific questions which arose in connection with the enforcement of the law, and he has usually agreed with, or at least been willing to be guided by, the solicitor of the department on legal questions which arose in connection with recommending cases for prosecution on the evidence submitted.

These two reasons, and the fact that Dr. Dunlap was sometimes in a position to detect Wiley's "in and out running," were all sufficient for Wiley to want him out of the way, and to have his place filled with one of his time-serving syncophants.

He succeeded in getting McCabe off the board so as not to be hampered by any legal objections which an independent lawyer might make; but he has not yet been successful in getting rid of the watchdog Dunlap; so now he is going about wailing and complaining, even as Haman complained of Mordecai.

Dunlap is a better friend of honest pure food regulations and law enforcement than Wiley, for he has no strings tied to him, and no ulterior purposes to subserve.

Wiley is the false friend of the pure food cause, who nevertheless prospers for a while.

For Wiley to talk about "leaks" in the Bureau of Chemistry when information of his acts gets to the public which he would like to conceal, indicates that he is lacking in a sense of humor; because the Bureau has been a regular sieve for the benefit of his friends.

The flagrancy of his action in the lead poison case is accentuated by his attitude against the use of 1/100th of 1 per cent of saccharin as a sweetener in foods for the benefit of those who might prefer it to sugar.

In the brief which he filed in opposition he said:

The argument that it may be used in small quantities is the old familiar one which adulterators and those who seek to adulterate have used from the very beginning of things. If we admit one injurious substance in small quantities, we cannot, with any justice, exclude any other. If this principle is acted upon, and becomes valid by authority of law, we cannot with any consistency object to any small quantity of borax, benzoate of soda, benzaldehyde, formaldehyde, sulphate of copper, salicylic acid or coal tar dyes, or any other of the deleterious bodies which the debasers of food have used and are using today. **The argument of small quantities has absolutely no ethical, logical or legal foundation and is most dangerous.**

(The "italics" are ours.)

Now read what he said in the lead case:

In view of the small amount of lead contained in this sample, and also because of the fact that investigations are being

made by the Department as to the presence of lead in baking powder ingredients, I would recommend that this case be placed in permanent abeyance.

Yet lead is admittedly a cumulative poison, and saccharin is admittedly not a poison. But Doc Wiley's action in favor of a small quantity of lead benefited the baking powder trust; and his action against an infinitesimal quantity of saccharin, favored the sugar trust.

Doc Wiley complains, through his publicity agents, that the whole record in the lead poison case was not printed. That was a bluff, and a cheap way of trying to diminish the effect of what was printed.

The whole record is even worse, because it discloses a memorandum in Wiley's handwriting to the effect that:

There is no harm in issuing citations in these cases, but they must not go any further.

"No harm" to whom? To the dear public to whom he always gives the benefit of the doubt? No; to the baking powder trust, of course; with whom he proposes to engage in friendly co-operation *at government expense*, and in the meantime let the dear public reap all the dire results which he has, from time to time, predicted in the use of small quantities of other substances which he wanted to condemn.

Compare his attitude of benevolent co-operation in the case of "lead" with his statement before the Moss Committee, that he would, if he had the power, have put the alum baking powder people out of business; and his efforts to damage the millers, the grain men, the farmers and the dried fruit shippers, because of small quantities of ingredients infinitely less injurious to health than lead.

But Doc Wiley is not without his champions.

In reply to our letter of February 24th, we received the following from a member of the House of Representatives:

"February 26, 1912.

"Mr. Herman B. Meyers, Editor AMERICAN FOOD JOURNAL,
15-21 S Market Street, Chicago, Ill.

"My Dear Sir: I am in receipt of your stereotyped letter, one of 391 sent to the Members of Congress, slamming Dr. Wiley; and I wish to say, kindly but firmly, if you have any more rubbish of that kind to dispose of, please do not litter up my office with it, as the rag-man would probably be glad to get it, and would pay pure-food prices for the same.

"Yours truly,

(Signed) "THERON AKIN."

"But faith, fanatic faith, once wedded fast
To some dear falsehood, hugs it to the last."

"Faith is a fine invention
For gentlemen who see;
But microscopes are prudent,
In an emergency."

Nevertheless we urge upon Congress a thorough and real investigation of Wiley and the manner whereby the pure food law has been enforced.

Amendments are being urged to the law and changes in methods of administration; but Congress should first learn how the present provisions are being enforced, and it will then know better what the character of changes, if any, should be.

If such an investigation is had, we promise interesting developments, and a healthy purification.

We will then know whether the wailing against Mordecai Dunlap is justified, or whether Haman Wiley should be "hoist by his own petard."

By all means turn on the searchlight.

ANOTHER MANUFACTURED SCANDAL.

The AMERICAN FOOD JOURNAL's staff correspondent at Washington, whose letter appears on another page, gives some interesting inside facts in the so-called everglades "scandal" in the Department of Agriculture. Practically none of the facts brought out in this letter have come to the knowledge of the general public, which has depended for its knowledge of the state of affairs on the Associated Press reports in the daily newspapers.

It is a fact not generally known that Jackson Elliott, manager of the Associated Press' Washington office, is a brother of G. C. Elliott, formerly chief drainage engineer of the Department of Agriculture, who was dismissed from the department on a charge of a technical misappropriation of funds and whose dismissal is one of the reasons for the present investigation. G. C. Elliott is charged, also, with making up a report in which material from the report of another engineer was used. There is no need to comment further on the reasons that might exist for the sending out of garbled reports by the Associated Press. One significant feature of these reports is that the story printed as to the letter of Representative Frank Clark of Florida, in which he made certain proposals to a Chicago real estate promoter, represent him as being in the aggressive, whereas he was very much on the defensive and very anxious to prevent the letter becoming public.

What interests the people most is the attitude of certain newspapers and certain interests toward Secretary Wilson. This is best illustrated by an editorial article in *Collier's Weekly* of March 9th headed "The President Should Act," in which a vicious attack is made on the secretary and in which he is charged, among other things, with making a series of attempts to nullify the food law. The everglades case is brought in as an additional reason for the dismissal of Secretary Wilson, so that all attempts to show that Wilson is responsible for the "scandal," which should really be laid at the door of the discredited engineer, Elliott, and Representative Clark, have a bearing upon the administration of the food law, inasmuch as certain food manufacturing interests, who have helped Wiley by paying for press bureau work in his behalf, have always opposed Secretary Wilson because of the frequent check he has put on Wiley's activities. The everglades case is not a scandal except as these interests want to make it appear so in the interests of Wiley and Wiley interpretations of the food law. If there were no effort to discredit Secretary Wilson on account of the way he has administered the food law, the everglades case would never have been mentioned. True, there is also the influence of the stock jobbers who want to control the Bureau of Statistics, and *Collier's Weekly* is also a special pleader for them. But their influence is not so powerful as the influence of the food people who want Wilson removed because he blocks Wiley's efforts in their behalf.

Collier's Weekly, in the same issue in which it calls upon the President to act in the case of Secretary Wilson, contains two other significant articles. One of these follows the Wilson editorial and quotes resolutions lauding Wiley passed by an organization of food manufacturers at a recent convention. The other is an article on the cotton boll weevil in Texas and Mississippi, and shows what work has been done by the Department of Agriculture in combating this evil. In this article everything said about the department is commendatory, so that *Collier's* must admit

on the showing in its own pages that the department is not altogether bad.

But the crowning fact is that however great the scandal and however much the Associated Press is able to fill the columns of the daily papers with articles seeking to discredit Secretary Wilson's administration of his department, the House of Representatives, in adopting the various features of the agricultural appropriation bill, has twice increased the appropriations for different bureaus in the department without the suggestion of the secretary. The Bureau of Plant Industry gets an increase of \$100,000 and the Bureau of Forestry is granted \$225,000 more than was asked for it. If Congress, which knows the facts, had believed that Secretary Wilson was unfit to hold the office that he has filled creditably for fifteen years and through four administrations, would it have placed these large sums in his hands? This action is a refutation of all the charges and all the innuendoes that have been published in the organs of the disgruntled interests from *Collier's* down—or up.

Some day the editors of the daily newspapers throughout the country, who have observed how they have been led to print the stuff the Associated Press sends out about "scandals" in the Department of Agriculture, every story a veiled attack on Secretary Wilson, will begin to wonder why the stories fail to measure up with the very evident official confidence in the Secretary of Agriculture, and the Associated Press will be very sharply called to account.

THE VINEGAR DECISION.

After a period of tentative food inspection decisions, we have at last some official ones. Several of these are disguised standards. Legally, the Board of Food and Drug Inspection can sign anything at all and call it a food inspection decision. Secretary Wilson shut down on the tentative decisions last month, and ordered that no more of these threats be issued. Hearings on such matters as may be taken up for decision by the board will be had as heretofore, and such decisions as are issued are to be in the regular form.

The usefulness of many of the decisions heretofore issued is questionable. Congress failed to incorporate a provision for food standards in the food and drugs act for good and sufficient reasons, but decisions that are in effect standards have been issued from time to time. The recent vinegar decision, printed on another page of this issue of the AMERICAN FOOD JOURNAL, is a set of standards and is practically so announced. All food inspection decisions are or should be for the purpose of carrying out the provision of the food and drugs act. In the case of the vinegar decision it will be noted that the full board did not sign the document. Dr. Dunlap dissented for what he regarded as a plan to evade the provision of the act in regard to adulteration by permitting the addition of water to cider vinegar to reduce it to four per cent acid strength, taking the position that any addition of water is adulteration and should not be permitted whether declared in the label or not. The act of adding water to reduce the acid strength of the vinegar he regarded as an adulteration *per se* and not to be cured by a label declaration. If the present decision stands as good law and good morals, then we shall hear that the addition of water without declaration on the label is no crime—the crime consisting in the failure to notify the purchaser.

Such an attitude by the Board of Food and Drug Inspection would have had an important bearing on

the case brought against certain vinegar made by the H. J. Heinz Company in Pittsburgh some weeks ago, in which the addition of water was admitted.

FINAL DECISION AGAINST SACCHARINE.

By a vote of two to one the three Cabinet members charged with final decision in pure food cases held, on February 29th, that foods containing saccharine are "adulterated" with a "deleterious ingredient" and barred the product from use. Secretaries of Agriculture Wilson and Commerce and Labor Nagel voted to hold saccharine as an adulteration; Secretary of the Treasury MacVeagh held it was not.

Secretary of the Treasury MacVeagh signed the original decision prohibiting the use of saccharine, but further hearings which were held evidently convinced him that its use in very small quantities should be allowed, so that he dissented from the opinion rendered.

REFEREE BOARD RETAINED.

The provision in the agricultural appropriation bill now before the House of Representatives, providing \$625,000 for the work of the Bureau of Chemistry and including \$30,000 for the uses of the Referee Board of Consulting Scientific Experts, was adopted in the session of March 11th. An effort was made to eliminate the provision for the payment of the Referee Board, and Representative Moss of Indiana, Chairman of the Committee on Expenditures in the Department of Agriculture, was a leader in the fight made to eliminate the board.

THE ANNUAL CONVENTION.

In a letter from Secretary W. M. Allen of the Association of State and National Dairy and Food Departments, it is stated that the dates for the sixteenth annual convention of the association, which will be held in Seattle, have been fixed by the Executive Committee as July 9th to 12th, inclusive.

The nearness of these dates to the dates of the annual "golden potlatch" in Seattle, which takes place the week beginning July 15th, will enable many delegates and visitors to enjoy that event.

BOOK REVIEW

The Law of Pure Food and Drugs, by W. W. Thornton, of the Indianapolis bar.

This is a volume not alone for the lawyer within whose practice come occasional cases under the food law of his state or the nation. It is a book that may properly be used for the guidance of the manufacturer, the wholesaler, the jobber, or even the retailer of foods in his relations with his customers. In fact, its widespread consultation by the food purveying trade would result in lessened cost of litigation by the avoidance of many errors that the purveyor falls into through ignorance.

While essentially a legal work, it is so organized as to be readily understandable by the lay reader. Part I discusses the constitutionality of the statutes, the validity of the ordinances and regulations concerning pure food and drugs, and the powers of the states and municipalities to regulate and to prohibit, if necessary, their sale. Part II analyzes at length the Federal food and drugs act of June 30, 1906. In the exposition of this statute, and in his labors, the author has been greatly assisted by official documents or literature construing the statute, furnished by the Department of Agriculture. Part III consists of a review of the State, English and Australian decisions of the courts, in appropriate chapters and under proper headings. This, as well as Part I, is a phase of the work never before systematically undertaken in America. Including the index, a very concise and comprehensive portion of the work, 1113 pages in all are filled. The binding is buckram.

(Cincinnati: W. H. Anderson Co.; \$7.50 net.)

Household Science and the Table

LENT THE SEASON FOR SEA FOODS.

By Elenora Elizabeth Reber.

While there is no portion of the entire year in which fish, or sea food, as the whole class of fresh and salt water finny fish and shell fish is commonly designated, is a part of the daily diet of the country, the Lenten season, in the midst of which we now are, is the period in which a larger proportion is consumed than at any other time. The religious observance of the season with its attendant demands for self-denial is of sufficient extent to make a very perceptible difference in the demand for fish in our markets, and those whose habits of eating are not affected by ecclesiastical rules at this time, nevertheless, through the influence of suggestion, or the proneness to imitate, also undoubtedly in many cases find fish upon their menu more frequently than ordinarily during the weeks of Lent.

As a people we are giving more serious consideration to the study of dietetics than formerly, and food fads are as frequently foisted upon us and as tenaciously retain their hold as those of any other character. There are, perhaps, more preconceived notions concerning fish as food, and its peculiarities than any other universally popular article of diet. It is a fact which has been repeatedly noted that many kinds of fish, known to be wholesome, are yet not commonly eaten, whiting, silver hake and sea robin being among the varieties of which this statement is true. That there is prejudice against certain kinds of fish in different parts of the country that is not entertained in other locations. An example of this may be cited in the case of skate, which, while largely eaten in the West, until recently, was little eaten in the Eastern portion of the country. Today is sturgeon a highly prized fish and where formerly considered worthless, now commands a high price in the markets.

Then there is that popular fallacy still entertained by many that fish is a valuable "brain food." Scientists and chemists are agreed, however, that there is really nothing in that idea and they declare that no more of fish goes to the building of brain tissue than many other kinds of meat. The phosphorus, which it was declared was the cause for its great value to brain workers, it is now decided is not present in any larger quantity than in many other foods, and what is more discouraging to those who advocated its efficiency, it is held that even if the phosphorous content were large it would not be of any significance, for it is the consensus of opinion of eminent physiologists that phosphorus is no more essential to the brain than nitrogen, potassium or any other element which occurs in its tissues.

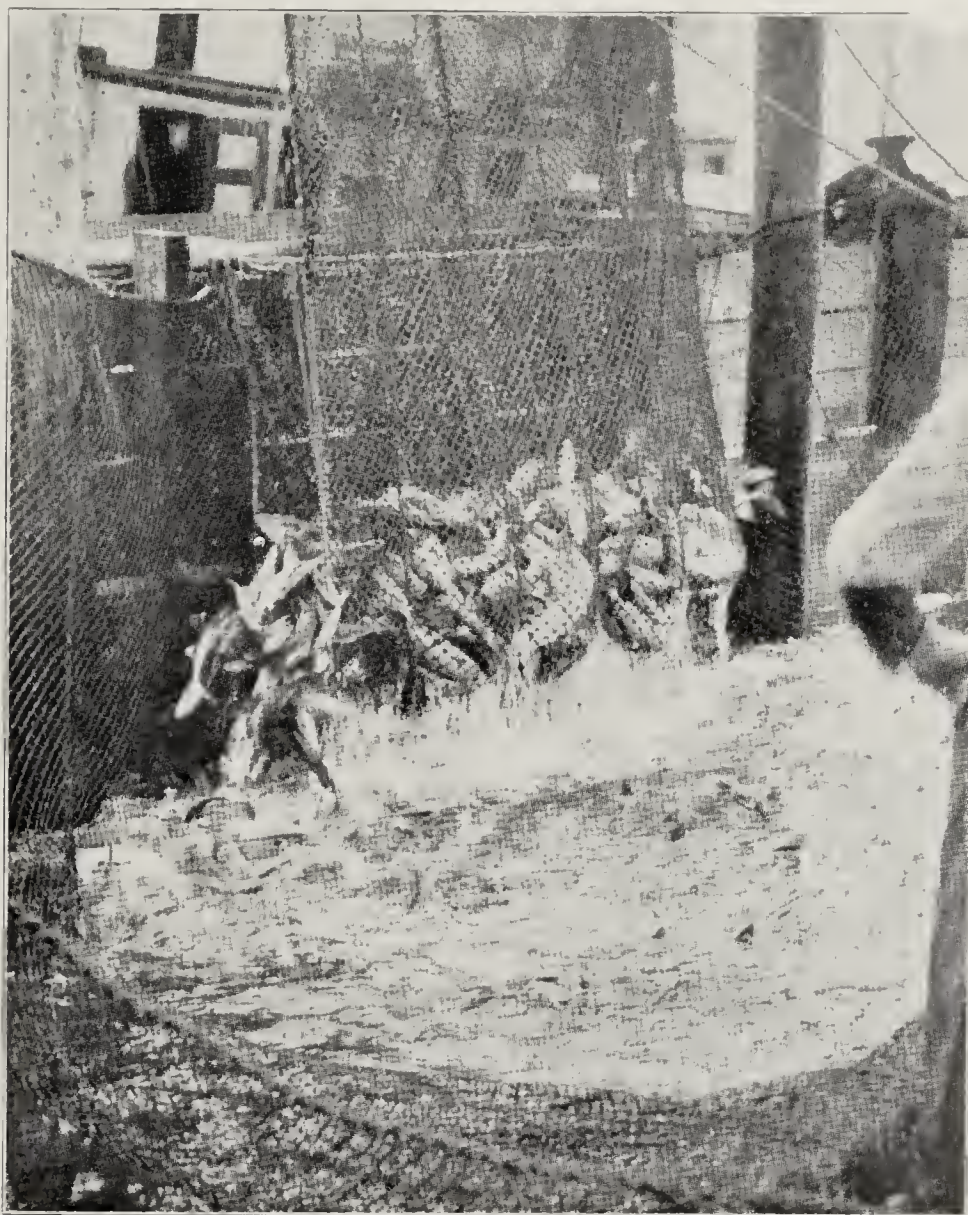
Yet in spite of these exploded misconceptions concerning fish, the place of this kind of food in our diet is an important one. "It is well understood," says on authority, "that

persons in varying conditions of life and occupation require different kinds and quantities of food. For the laboring man doing heavy work the diet must contain a comparatively large amount of fuel ingredients and enough of the flesh-forming substances to make good the wear and tear of the body. These materials are all present in the flesh of animals, but not in the requisite proportions. Fish and the leaner kinds of meats are deficient in materials which yield muscular power. When, however, fish and meat are supplemented by bread, potatoes, etc., a diet is provided which will supply all the demands of the body. Where fish can be secured at low cost it may advantageously furnish a considerable portion of the protein required, and under most conditions its use may be profitably extended solely on the plea of variety. From the standpoint of both nutritive value and palatability fish, according to a recent German investigator, is an important food product and, as shown by his experiments, equal to beef as a source of energy in the diet. It produces the same sensation of satiety and this persists for a long time.

Fish usually contains less fat than is found in meat. There is, however, much difference in the fat content of the various kinds of fish. They may, in fact, be roughly divided into three classes, the first to include those containing over 5 per cent of fat; the second, those containing between 2 and 5 per cent, and the third, those containing less than 2 per cent. The first group includes such fish as salmon, shad, herring, Spanish mackerel and butter-fish. The second comprises white-fish mackerel, mullet, halibut and porgy; while in the third we find smelt,

black bass, bluefish, white perch, weakfish, brook trout, hake, flounder, yellow perch, pike, pickerel, sea bass, cod and haddock.

Three things are demanded of a food to make it popular in the estimation of large numbers of people, namely, that it be at once digestible and palatable; that it furnish nutriment needed by the system, and that it be reasonably cheap. As to digestibility, a writer in discussing that subject says, "The term digestibility as commonly employed has several significations. To many persons it conveys the idea that a particular food agrees with the user. It is also very commonly understood to mean ease or rapidity of digestion. One food is often said to be preferable to another because it is more digestible, i. e., is digested in less time. A third meaning, and one which is usually understood in scientific treatises on such subjects, refers to the completeness of digestion. For instance, two foods may have the same composition, but, owing to differences in mechanical condition, or some factor, one may be much more completely digestible than the other; that is, give up more material to the body in its passage through the intestinal tract.



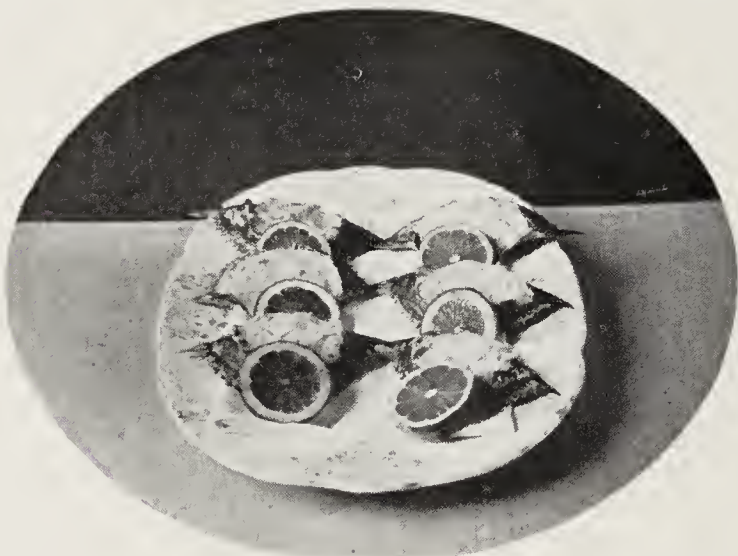
BRAILING SALMON ON THE COLUMBIA RIVER.

A number of experiments were conducted by the United States Department of Agriculture specialists to determine how thoroughly fish is digested and to compare it in that respect with other foods. It was found that fish and lean beef are about equally digestible. In each case about 95 per cent of the total dry material, 97 per cent of the protein, and over 90 per cent of the fat were retained in the body. Other experiments of the same character revealed the fact that salt fish is less thoroughly digested than fresh fish. It has also been demonstrated by experiment that the leaner kinds of fish, such as cod, haddock, perch, pike, bluefish, etc., are more easily and completely digested than the fatter kinds as salmon, shad and mackerel.

Immense quantities of fish are prepared for future use by salting, drying, smoking and canning, upon these processes important industries having been built up on both the eastern and western coasts of the United States. With the exception of a few kinds that are preserved whole, preserved fish as a rule, show a small percentage of refuse, and the percentage of actual nutrients is accordingly much larger than in the corresponding fresh fish, owing to the removal of a large part of the refuse and more or less water. The gain in nutrients is mostly represented by protein, which is the most valuable nutrient. Dried fish is richer in nutritive material, pound for pound, than fresh fish, since it has been concentrated by evaporation. It has been found that the average loss in weight in drying is about 30 per cent. When foods are cooked there is usually a loss of weight owing to the evaporation of water, and in the ordinary methods of cooking fish and meat some nutritive material is lost also. In recent experiments by the governmental stations it was ascertained that the water in fish was boiled contained from 9 to 11 per cent of the total fish protein. Canned fish, which is in effect cooked fish, compares favorably as regards composition with fresh material.

Salmon is the greatest of our canned fish staples and catching and processing the product forms one of the most important industries of the Pacific Coast. During the salmon season whole fleets of vessels are engaged in taking the fish from the waters, and the canneries situated at the water's edge, so as to receive the fish in the freshest possible state, and can them without loss of flavor, are busy and interesting places. The fish are caught in a large net and dipped up into the boats with a dip-net called a "brailer," which is operated by steam machinery.

While the various kinds of shell fish resemble other food fishes in general composition, they contain, however, an ap-



DEVILED CRABS.

preciable amount of carbo-hydrates. Oysters are the most important and most largely consumed of our shellfish. Roughly speaking a quart of oysters contains on an average the same quantity of actual nutritive substance as a quart of milk, or three-fourths of a pound of beef, or a pound of bread. But while the weight of actual nutriment in the foods mentioned is the same the kind is widely different. The nutritive substance of oysters contains considerable protein and energy-yielding ingredients. Oysters come nearer to milk than almost any other common food material as regards both the amounts and relative proportions of nutrients. Lobsters, crabs, shrimps and crawfish are shown by analysis to contain a fairly large percentage of nutrients, and they resemble lean meat rather than fat fish in composition. These varieties of shellfish are usually regarded as delicacies rather than as staple articles of diet among fish consumers.

Fish is commonly boiled, steamed, broiled, fried or baked,

or may be combined with other materials in a made dish. For broiling and planking request the dealer to split the fish down the back.

FISH SOUP STOCK.

While there are many Lenten soups made without stock, fish stock when properly prepared is excellent. Put into the soup pot a tablespoonful of butter drippings, add a tablespoonful of chopped onion, carrot and turnip. Fry these without browning, then add fish bones, head and trimmings, a stalk of celery, sprigs of parsley and of thyme, a bay leaf, and a slice of onion. Cover with water and simmer all an hour or more, then season with salt and pepper, after which strain. Make a roux of one tablespoonful each of butter and



LOBSTER AU GRATIN.

flour, add a cupful of cream and mix this amount with each pint of fish stock.

BROILED STRIPED BASS.

Have steaks cut from a good sized fish, trim them into shape, wipe until quite dry, then sprinkle with salt and pepper; rub these seasonings in well, then moisten the steaks with sour wine. Let stand on ice for two or three hours, so that the wine will soak in, then drain, dust with flour and broil over a clear fire.

DEVILED CRABS WITH TOMATOES.

Boil a dozen crabs and chop the meat until quite fine. To each pound of meat allow a tablespoonful of breadcrumbs and add to all half a pint of rich tomato puree. Add the juice of a lemon, salt to taste, pepper heavily, using both black and red pepper, and add also a pinch of mustard. Stir this well together, add a glass of sherry, and with the mixture fill some of the empty crab shells which have been cleaned for the purpose. Cover with bread crumbs and set in the oven to bake for ten minutes. Serve on platter garnishing the dish with lemon slices.

SALMON CROQUETTES.

Make a white sauce with half a pint of rich milk, half an ounce of butter, yolks of two eggs, salt and pepper to taste, and then add to it some chopped parsley, a few drops of onion juice, and stir well until perfectly smooth. Into this mixture then stir enough coarsely chopped salmon to make a mixture that will shape into croquettes. Form the croquettes, dip into beaten egg and bread crumbs, and fry until brown in hot fat. Serve with tartar sauce.

SALMON CREAM SOUP.

Boil two pounds of salmon in three quarts of water for fifteen minutes. Turn off this waetr, and pour over the fish two quarts of water, add salt, pepper and an onion with a bunch of parsley and cook slowly for an hour or so. Then take up and strain through a sieve. Set over the fire again and thicken with a tablespoonful of potato flour stirred in a cupful of cream and the yolk of an egg. Serve with croutons.

CREAM OF SHRIMPS.

Shell and chop lightly about fifty boiled shrimps. Fry them in butter lightly, without browning in a saucepan. Add a tablespoonful of fine bread crumbs, four ounces of boiled rice, a small onion, a thin slice of bacon, season with salt and pepper, and add two quarts of thin, lightly flavored stock. Cover the saucepan tightly and cook the mixture slowly for two hours. Press through a sieve, add a glass of sherry, and serve hot.

SARDELLE SALAD.

Sardelles are fish resembling sardines and may be purchased ready pickled. Take twenty-four sardelles, and pick half of them into small pieces. To this add one medium sized onion sliced, a bunch of cress minced, three large boiled potatoes cut fine, three hard boiled eggs chopped, one tea-

spoonful of salt, half a teaspoonful of dry mustard and mix all with enough boiled cream dressing to moisten. Heap this onto a dish in a bed of lettuce and garnish with the remaining twelve sardelles.

LOBSTER AU GRATIN.

Split a good sized lobster in half, taking care not to break the shell. Pick out the flesh carefully and mince, seasoning it with a little chopped parsley, grated nutmeg, salt and a few grains of cayenne pepper. Mix a tablespoonful of flour with a teacupful of milk, boil for a few minutes, then stir in smoothly the seasoned lobster mixture, add the strained juice of a lemon, and draw off the fire to cool. Stir in the beaten yolk of an egg, then divide the mixture between the two shells, cover each with bread crumbs, place two or three small pieces of butter on top of each, then brown in hot oven. Garnish with slices of cut lemon and parsley or other garnish available.

Something About Pepper.

Of all seasonings, saving salt, pepper is perhaps the most commonly used, that is of the seasonings usually classed as spices. There are a number of different varieties of pepper and a wide range in the values of them, according to a well posted grocer, who recently talked on the subject. He con-



PLANKED FISH.

veys the information that in a general way the character of the pepper may be determined by its color. Low grades are ground with dust and dirt and shells, and usually is very dark, while the high grades have the objectionable ingredients mentioned removed and are accordingly much lighter in color.

Practically all of the pepper comes from the Dutch East Indies, the Spice islands, and the mainlands adjacent to that section. The highest grades of black pepper probably are the Malabar peppers, including Tellicherry and Alleppey.

Singapore pepper is that grade shipped from Singapore, this being not a growing country, but merely a port through which the product is shipped, the product coming from the neighboring islands.

Black pepper grows on vines, is picked green, then dried and smoked, which latter process is responsible for its black color. White pepper grows on the same plant as the black pepper, the only difference being that the pods are ripe instead of green, as is the case with black pepper. When ripe the peppers are red, and after they have attained that stage they are picked, dried and prepared for market.

Roasting Versus Stewing.

That the juices of meat play an important, though as yet an imperfectly understood, part in our physical economy is a very evident fact. It is the juices alone that impart the characteristic flavor to different flesh, for when they are removed from mutton, beef, pork, etc., the palate alone cannot distinguish the difference between the remaining solids. It should, therefore, be the chief aim of every scientific cook to retain the juices in the different processes employed in cooking meat. Here arises the great difference between roasting and stewing.

Now the process of roasting or grilling is such that by immediate exposure to great heat the outer layer of albumen which is contained in the meat is immediately coagulated, and the pores of the meat are thus closed so that the juices

within cannot escape, but preserved entire, with the exception of the small amount which escapes as gravy on the dish.

The process of stewing, on the other hand, is diametrically opposed to that of roasting. The meat is placed to begin with in cold or only moderately warm water, which is gradually raised to the boiling point, with the consequence that the pores never being closed the albumen and juices are boiled out of the meat into the water. Incidentally it may be remarked that two national modes of cookery are represented in the roast and the stew, the latter belonging to the French, and the former being characteristic of the English method. Thus we find a reason for the fondness of the Frenchman for his bouillon or soup. His meat being stewed is not so nutritious as the roast and he secures the juices in his soup, thus giving him a complete diet. The Englishman with his roast or grilled meat on the other hand considers soup merely a luxury.

It really makes little difference how we secure the constituents of the meat for our system, just so we get them. The American takes his both ways, preferences for boiled and roasted meats being matters of individual taste, and favoritism for either method is not sufficiently pronounced to make the choice a national one.

Virtues of Cider.

Comparatively few persons realize the wholesome qualities of cider as a beverage. We are told that of all alcoholic liquors it is the most beneficial—perhaps partly at least because it contains the least amount of alcohol. Of gout and rheumatism cider is claimed to be the nearest known approach to a cure. The malic acid in cider neutralizes any excess of chalky matter due to eating too largely of a meat diet; its phosphorus renews the essential nervous matter of the brain and spinal cord; its tannin invests it with powerful tonic properties, while its acids aid the liver to relieve use to eliminate from the body all that obnoxious matter that dulls the brain and brings about not only rheumatism, but jaundice and skin eruptions. It should be remembered, however, that it is pure apple cider which contains these beneficial attributes, and not manufactured ciders in which little or no apple juice is used.

A WORD WE FAIL TO SEE.

It is curious how we regard the word "temperance." To thousands it means nothing more than abstinence from alcohol. I know mothers, for instance, who ardently write and valiantly preach temperance to the "poor and down-trodden," but who daily teach intemperance to their own children by allowing them to make playthings of their stomachs, and who are training those children to exaggerate the importance of appetite and desire. Those mothers do not seem to realize that there is more than one way of teaching self-control, and that the idea that we must do and have everything that other people do and have causes just as much misery as intemperance in alcohol. There are scores of so-called "temperance" women who ought to take down their dictionaries and get a broader and truer meaning of the word which they so earnestly advocate. The only evil in the world is not the appetite for alcoholic stimulant; the world is full of things that we cannot have, things that would not be good for us if we had them. To recognize that fact and to be able to rise above it means "temperance" just as much as to rise above the single desire for strong drink.—*Ladies' Home Journal*.

SECRETARY WILSON'S SERVICE.

Honorable James Wilson, secretary of agriculture, has gained the distinction of serving longest in the presidential cabinet. He has made a new record. The congratulations which he is receiving should be and are based on his long record of accomplishment, which cannot be dimmed by the unfortunate fact that under him have served trouble-makers.

No one has ever said one word against the clean and unimpeachable character of Mr. Wilson; no man ever doubted his able courage. Nor can his record be successfully assailed after man's ingratitude to man lies still in history. He has served under McKinley, Roosevelt and Taft. His works are in bound records and he has the appreciation of those who know him best.

Being assailed by a few small congressmen and a few trouble-makers, and a few with ambitions, will not in the least dim his record. His services to the American people will not go unrewarded. Well done thou good and faithful servant, will be said by the people when his public service is at an end.—*Modern Miller*.

PREPARATION OF CHOICE HAMS.

Home curing of hams is probably not as general as it was in former years. Still it would seem that no farmer who raises hogs should be without the knowledge required to prepare hams of good quality at least for home use. The process is comparatively simple and requires no special skill. As pointed out by E. W. Magruder of the Virginia State Department of Agriculture, the essential conditions which must be realized are healthy hogs and sound meat.

"To secure the healthy hogs, give them plenty of range with as great a variety of food as possible, and plenty of good, clean water. Smithfield hogs are allowed to run at large most of the year. If you have woods to supplement your pasture, so much the better. The hogs then obtain a variety of food, as nuts, berries, roots and grass. In hunting over the large range they take sufficient exercise to keep them healthy and develop and enlarge the muscular tissues, that is, the lean meat, but as the work is not hard, the muscles grow without becoming tough and stringy. Allow them a good range up to the time of killing, and do not fatten them in pens. They fatten as well when left out in the fields and keep healthy. As they fatten they travel less, but this travel converts much of the food into muscle or lean meat instead of altogether into fat, as is the tendency when penned, as illustrated by the western meat. To have the best meat and that which brings the best price and which has the best flavor, and with the fat and lean properly intermixed and proportioned, you must let the hogs have plenty of exercise and then kill them before they are too fat. Have them fat, but not so fat they can hardly walk. There is no economy in having them too fat, and the meat is not so good."

To secure sound meat "be careful to kill only in cold, frosty weather. After November 1 is safest. Allow to hang up all night to drain and thoroughly cool. The hog cuts out nicer and keeps better if stiff when cut out."

There are various excellent ways of curing the hams. The following, used for many years with success on the farm of Col. Chas. Schuler, Commissioner of Agriculture of Louisiana, is described in a bulletin of the Louisiana station:

"When hogs are fat, select any time during the month of December, January or first half of February, when weather is clear, wind from the north to northwest, with the thermometer registering below 35° F. at sunrise. Have your water hot and scald as soon as hog is dead. Hang up and disembowel the animal just as soon as it is cleaned. No butchering animal should ever be permitted to cool off until after it is disemboweled. Cut up the carcass as soon as it is through dripping. Saw or split the backbone. Let it and the spare rib remain on the side, and make them as long as you can. Hams and shoulders small. Hams to sell readily should weigh from 15 to 18 pounds.

"To half bushel fine salt add half pound pulverized saltpeter, one pound, finely ground black pepper, four pounds brown sugar; mix thoroughly. Rub ham with mixture. Pack in box, skin side down. Apply double handful of mixture to flesh part of each ham. Then apply plenty of clean salt, never permitting the meat to touch, without salt being between, covering all parts and filling every crevice, and let them remain in the salt six weeks.

"After being in salt six weeks, select a clear day, string each ham and dip in a boiling solution of one pound borax dissolved in 15 gallons of water and hang up high in a dark smokehouse (the higher the better) and smoke, using green hickory wood. Smoke daily for two weeks or more, as preferred. By April 1 at latest hams should again be dipped in boiling water, to cleanse them from all impurities, wrapped in paper, then cloth and this painted with some cheap mineral paint. Hang up again and leave until used or sold."

Two methods which have been successfully used by Virginia farmers are described by Dr. Magruder as follows:

"(1) On the fleshy surface of each ham rub in thoroughly fine saltpeter; use one tablespoonful to a 15-pound ham, and vary the amount according to size of ham. Then pack away for 4 to 6 hours, with flesh side up, in order to give the saltpeter time to strike in; then take up and rub well with salt and pack away, using plenty of salt. As they are packed away they should be pressed into plump, symmetrical shape while soft. Pack near top of bulk, and never over 2½ or 3 feet deep. If they are packed deep and have other meat put on top of them,

they will be mashed flat and out of shape. They remain packed in plenty of salt for six weeks, when they are taken up, well washed and when nearly dry about one teaspoonful of powdered borax is sprinkled over the fleshy surface from a large pepperbox. The borax is to keep off skippers. They are then hung up by the hock and smoked lightly on damp days with hickory chips. When about nine months old they are sold. The hogs average about 180 pounds, making hams from 10 to 18 pounds.

"(2) Salt lightly one or two days to bring out blood; then to each 100 pounds of hams use 8 to 10 pounds of salt, 2 ounces saltpeter, 2 pounds brown sugar and 1 ounce of red pepper; add to 4 or 5 gallons of water in a tub and thoroughly mix. This brine should be strong enough to float a fresh egg. Place hams in a tight barrel and pour brine mixture on till hams are all covered. After remaining in brine 4 to 6 weeks, hang up by hock and smoke gently several weeks with hickory chips. Early in March, before warm days, when flies begin to move, wrap each ham in paper and put in a bag and rehang. By late summer the hams are ready for market."

The method of preparing the famous Smithfield hams of Virginia is fully described in a report of the Bureau of Animal Industry of this department. The method of curing is there described substantially as follows:

"The flesh surface is sprinkled with fine saltpeter until the hams are as white as though covered by a moderate frost; or, say, use 3 or 4 pounds of saltpeter to 1,000 pounds of hams. Immediately salt with fine Liverpool salt, covering the entire surface. Pack the hams in bulk, not deeper than 3 feet. In ordinary weather they should remain thus for 3 days. Then break bulk and resalt with the fine salt and again pack in bulk, and each ham should remain in bulk one day for each pound the ham weighs; that is, a 10-pound ham should remain 10 days. The hams are then taken up and thoroughly cleaned by washing in warm water. When nearly dry rub the entire surface with fine black pepper. The hams should now be hung up and gradually and slowly smoked for 30 or 40 days with hickory or red oak. When the smoking is completed they should be re-peppered and bagged to guard against vermin."

It is stated that "these hams improve with age, and may be considered perfect when one year old."

Commenting upon methods of curing hams, Dr. Magruder says:

"The saltpeter is used to give the ham a good, red color, to make it firm and also as a preservative. The salt, of course, is used as a preservative, and plenty of it should be used, as the excess will not hurt, and not enough will allow the meat to spoil. When packing in bulk, be sure to press the hams into a plump, symmetrical shape, and do not have the bulk over 3 feet high, otherwise the weight will flatten out the lower hams and spoil their shape. The plumpest Berkshire ham can be spoiled in shape by improper packing. Pepper and sugar are added, presumably to improve their flavor, but I have never seen that they improve them any, and I advise against sugar or molasses, as it is more trouble and attracts flies. The pepper may be used if desired, as it will do no harm and may help to keep off skippers. The borax is added to keep off flies, which lay the eggs, which hatch into skippers and if properly applied is a sure preventive. Bagging is for the same purpose, but unless done early and thoroughly before the flies come about it is ineffective. It is troublesome. The smoking, which should be done in damp weather, is supposed to serve several purposes. First, to dry the meat and thus make it keep better; second, to deposit a little creosote and other ingredients from the burning wood on the bacon, which improves its keeping qualities, and also supposedly improves its flavor. In my opinion, the object in curing should be to preserve the ham, keep it sound and then let it retain all of its natural taste and flavor and not try to add flavor and taste. The natural ones, when preserved in their purity, are good enough without trying to add to them artificially.

"In hanging meat care should be taken not to allow any two pieces to touch, for if so they are liable to be infested with skippers. Hams should not be eaten until at least six months old. When two years old they have reached their prime. Many claim they still continue to improve for many years, but I very much doubt it."

As Dr. Magruder states, "after the ham is cured one of the most important operations must be gone through with before it is ready for the table—that is, the cooking."

"The hog may have been raised right, fattened properly, killed at the right time and cured as it should be, but if it

is not cooked properly the previous work is all in vain and the ham is not good. * * * A large ham—say 18 pounds—is much better flavored, sweeter and more juicy than a small one—say under 8 pounds.

"Wash the ham thoroughly, then soak in cold water several hours, the time varying with the size of the ham. This soaking is to dissolve out the excess of salt. The ham is then put in the boiler full of boiling water. The temperature should then be lowered slightly and the boiler just kept simmering. Keep the water just barely boiling for 4½ hours for an 18-pound ham; that is, a quarter of an hour for each pound of ham. If the hams are larger or smaller, vary the time to suit the weight. As the water boils out, add fresh boiling water, and always keep the boiler full. For very large hams it is advisable to cook in two waters. Why should the ham be put in boiling water? Portions of the lean meat, the albumin and some of the juices and flavors are soluble in warm water, while boiling water coagulates the albumin just as it does the white of an egg. So, if put in cold water and heated to the boiling point, some albumin and much of the delicate flavors which are so sought after in hams would be dissolved out by the water as it warmed up to the boiling point; but if put into boiling water, the albumin is coagulated at once on the surface and all the juices and flavors sealed in and kept there till eaten. While cooking the ham is just kept at the boiling point of water, which is sufficient heat to cook it thoroughly without separating the fibers or 'boiling it to pieces,' as a rapid or hard boiling would do."

The subject of the cooking of meats is more fully discussed in United States Department of Agricultural Farmers' Bulletins 34 and 391.

SCIENTIFIC MANAGEMENT AND HYGIENE IN BOTTLING.

The following communication to bottlers by Dr. Oscar Dowling, president of the Louisiana State Board of Health, indicates the extreme interest taken by the board in the welfare of business interests in the states, as well as the efforts made to conserve the health of the people:

The popular use of the phrase "scientific management" signifies a philosophy in the affairs of man different from that of the past.

This term implies systematized methods which result in a saving of time, of labor, of money. It means the application of intelligent thought to the "machinery" and purposes of any enterprise. It imparts effort to produce the largest legitimate profit on the capital invested and labor involved.

To manage a business in accordance with this modern principle, a knowledge of the most minute details is imperative, and, in addition, a comprehension of the relation of the enterprise to other commercial activities and to industrial conditions.

It used to be that almost any commercial venture, large or small, "ran itself." There was little or no competition; no rush to make great fortunes; no hurry—"to kill time" rather than to make every minute count was the order yesterday.

But with the changed attitude of the public mind toward all social and commercial aspects of life, necessarily there has come a change in business methods.

To be a success in any kind of work today, the individual must plan intelligently and execute with, at least, a degree of skill. Moreover, his scheme and efforts must fit into existing conditions. Training, common sense, industry, judgment, and receptivity to new ideas are the essentials of effective endeavor, in the modern social order.

But this is not the only element that must be considered. Within twenty years, the value of combined effort has become widely accepted.

We realize as never before that the individual, no matter how capable, is powerless to control certain phases of the industrial situation. Therefore, the successful business man, likewise those laboring in sociological fields, must unite, co-operate and co-ordinate forces to further the ends in view.

This is one of the lessons taught by trusts and corporations. In a free country, the rise of such combinations was inevitable, and from a practical viewpoint, these have not been an unmixed evil. In the widening of the thoughts of men they have played their part as effective examples of the importance of intelligent direction and the power that results from economic management.

These two principles, elemental in the activities of the present day, are the foundation stones of your organization.

Apparently, its aim may seem much simpler. It may appear to relate to practices, or to routine work, but fundamentally, it means a union of forces for increased profit and less waste. This is desirable for both producer and consumer, provided the "square deal" is kept in mind.

Your difficulties are the same met with in all associations of this character. As a rule, only the most intelligent in any enterprise are members of a general organization. The least progressive, those who need it most, do not attend conferences. This unsympathetic class form an almost insurmountable obstacle to rapid progress and the inauguration of methods conducive to the welfare of all. But this condition is really an opportunity for those who understand, to teach those who do not. And in your work there is one result that will surely follow—without new ideas and methods, the "junk man" will get them if they don't watch out.

The particular aspect of your business in which, as State Health Officer, I am particularly interested, is the wholesomeness of the product you manufacture and the conditions under which the work is carried on. I think this is a practical phase and one of great importance.

There is an ever increasing demand on the part of the public for the protection of health and the prevention of disease. One feature of this newly awakened consciousness is a demand for a pure food supply.

Almost everywhere in the past, in the collective mind, health officers were something of a myth. They were supposed to write reports and take charge of epidemics. But with the development of medical science, the scope of their work has enlarged. Even the physician in general practice is no longer apathetic to health conditions. The attitude of the people is that sanitary officers are public servants and should assume responsibility for the public health. There is now a feeling of dissatisfaction, because of the lack of necessary inspection of food products. The demand will become more urgent and imperative as the principles of hygiene become more generally known.

Those who have an interest in the supply should heed the signs of the time.

The requirements of the Louisiana Code are reasonable. Only the most necessary regulations are set forth in order that every one may comply. They relate to screening with 18-mesh wire, to the cleansing of the bottles and other receptacles; to the use of pure ingredients and sanitary bottles; and, perhaps, most important of all, care in the obtaining of a pure and clean water supply for the plant.

The Board of Health, through its laboratory department, has begun a systematic examination of the water supply of the entire state. In the February edition of the Quarterly Bulletin the results obtained up to date are given in full.

Method of handling is a feature often overlooked and left to incompetent help or to those who have no interest in the welfare of the consumer.

Through your organization, you can not only meet the demands of the most intelligent of the community, but you can lead in the establishment of yet higher standards than those now accepted.

A formal requisition by you for honest, thorough, official inspection of your plant and product at regular intervals, would give increased confidence in your business methods; it would raise the standard of all engaged in the business; it would bring reward in greater profits.

If it became more generally known that your association has rigid and stringent rules covering the mode of manufacture, that its members are held to these requirements, that the organization stands for pure and wholesome products only, the consumer would soon know that it is to his advantage to look for your label in advance of purchase.

Method in business pays, pure products pay, protective economic measures—deposit on bottles, for example, pay, a "new leaf" pays. To look out for "leaks" pays, not only in money but in the satisfaction that arises from work well done.

"Caps," "gas," "extracts" on one's trail suggest explosions—of temper if not the other kind. In this business the small (?) things count; in fact they are the business. It is important that your members understand this. I realize that it is your reason for being here today.

A clean wholesome product is its own advertisement and yours. And this is more a question of eternal vigilance than of expenditure; more a matter of intelligent, untiring supervision than elaborate machinery. It is certainly a question of knowledge of sanitary rules and obedience to them.

The voluntary co-operation of individuals engaged directly in your line of work, and others connected more or less closely with your interests, has been most gratifying to the Pure

Food Division of the State Board of Health, and to the individual members of the Board.

Timely suggestions have been of great value to us in the prosecution of our efforts for the adoption of hygienic measures by the food manufacturers and producers in the state. We are grateful for practical counsel and the opinions of those who have had experience in all phases of the work, and we welcome advice on all subjects pertaining to the health service that it may become more effective.

The things vital in your line are, it seems to me:

Intelligent effort to eliminate waste;

Practical application of scientific principles of business management to all phases of your enterprise, from the method of keeping the bottles clean to the endorsement of the principles and adoption of the measures of the National Organization;

A clear understanding of the results accruing to the trade from a spirit of true co-operation;

The offering of goods made only from the best and purest materials possible to be obtained; and,

A union with other forces in the state that are working toward higher standards and health protection.

The State Board of Health stands ready to do anything within its scope that may advance your interests, and the Pure Food interests, and the welfare of the citizens of Louisiana.

FEDERAL FOOD LAW AND "JAVA" COFFEE.

A great multitude of things have developed from the passage of the Federal food and drugs act, of June, 1906, that could not have been conceived by the most imaginative of enthusiasts on food legislation. Investigators on "the high cost of living" do not have to go beyond the consideration of the effects of that good law, so far as a great number of the food products are directly and the balance of them indirectly concerned. The elimination from consumption of enormous quantities of foods and beverages which formerly were altogether acceptable, and even relished by the people, but which are now taboo because of various rulings of the Federal authorities, has naturally increased the demand and, consequently, the price of the pure articles. The economist may discern a whole army of reasons for the "high cost of living," but the food manufacturer sees only one or two, and we are inclined to credit the vision of the latter rather than of the former. However, it was not this development of the Federal law—a law that in its broadest aspect has had the endorsement of this journal from its inception—that we had in mind when we began this note.

One of the most peculiar results of the operation of the law is in relation to the name "Java" as applied to coffee. For years previous to the passage of the law there were self-advertising monomaniacs to whom the legend, "Mocha and Java," was like the red cloak to the bull; it drove them stark mad—or seemed to do it. Anyone who advertised or sold coffees as "Mocha and Java" that were not true Mocha and Java respectively, was a thief, a jailbird, an outlaw, a highwayman and several similar flotsam and jetsam rolled into one. They admitted that there were such coffees—Mocha and Java; but it is quite certain they did not know that no coffee has been for generations cultivated in the city of Mocha, and that the coffees they admitted to be Java were not grown in Java at all, but in Sumatra, facts foreign to their consciousness.

The really surprising outcome of the agitation, with the subsequent passage of the law and the ruling bearing upon these coffees, is that instead of creating an increased demand for the fine coffees that, from time beyond memory, had ever been classified as Java, it became almost impossible to sell them at all. Conditions have somewhat improved, but the coffee trade at large balk at accepting the fine Mandhelings, Padangs, Corinchies—always known as Javas—under the name Sumatra, as the law requires they be labeled in respect to the country of cultivation. At the same time the trade will not accept the truly Javan coffees—coffees grown right on the island of Java—as they are undesirable in many respects as coffees.

Under existing conditions there is great danger that the pre-pure food law fine "Java" coffees will pass out of consumption, owing to the narrow, hair-splitting interpretation of the country of cultivation section of the law. No definite attempt, as far as we know, has been made to induce the Board of Food and Drug Inspection, United States Department of Agriculture, to reconsider this matter.—*The Spice Mill*.

CANADIAN FOOD INSPECTION.

By P. B. Tustin, Chief Food Inspector, Winnipeg Board of Health.

From history we learn that since the earliest days it has always been recognized that there should be a supervision of the food supply of the people. Some of the earliest Hebrew writings, on pieces of pottery, dated back to 850 B. C., have been discovered in excavations made in Palestine. These pieces of pottery were used as labels of jars of oil and stated: "Jar of pure oil" and mentioning the district from which the oil came. In the Holy Writings, Leviticus 22, 22, reference is again made to the sacrificial animals offered as sacrifices to the Lord. The High Priest acted as food inspector in those days.

From the writings of Herodotus and Plutarch, we learn that the Egyptians were forbidden to eat pork for the reason that it produced an excess of humors and eruptions.

The City of Athens had a wine inspector and in Ancient Rome, from the year 388 to the founding of the city, two officials exercised control of the meat market, public shops, and cooking of meat, and meat condemned by these officials was thrown into the Tiber.

In one number of the *Acta Populi Romani Diurna*, A. D. 164, the following notice is found: "The official Tetini punished the small butchers because they sold meat to the people which had not been previously inspected by the officials. The fines were devoted to a temple for the goddesses."

From these early days until today many laws, decrees and by-laws have been passed, many useful and many impracticable, with the object of protecting the consumer. If the necessity of such inspection existed in those early days, I venture the opinion that it is much more essential at the present time when foods can be kept for such long periods by refrigeration, chemical preservation and canning.

In these days of rush and hurry, eating, instead of being looked upon as a pleasure and the midday mealtime a pleasant break in the day's work, is regarded in the great majority of cases as an unfortunate necessity which must be got over as quickly as possible and the rush meals at the lunch counter or restaurant are the result.

The modern housekeeper is seldom able to show her friends into a stock room filled with her own work in the shape of home-made jams, pickles, cakes, bread, home-brewed ales and wines, nor does she pride herself in gaining a reputation as a culinary artists in these days; the butcher, baker and the grocer supply these articles of food.

The enormous number of young men between the ages of 18 and 24 whom we see around town and who live away from home, subsist on meals taken at a lunch counter or restaurant.

A great number of married women whose husbands do not return to lunch take no interest in the preparation of wholesome meals, take only a cup of tea and a biscuit at midday, and in the evening, on their return from a shopping expedition or the matinee, purchase some cooked meat at the store for their husbands' evening meal, and many apartment block dwellers obtain all their meals outside.

It is to be regretted that such a state of affairs is in existence, as it must eventually show its mark on future generations. That it does exist can be easily verified by inquiry, and it is this condition of affairs that calls for a strict inspection of all places where food is stored, prepared, offered for sale and sold.

Food inspection, to be efficient, should cover the inspection from the raw material to the finished product. The inspector must see that the raw material is wholesome, that it is prepared in sanitary premises, that the people preparing it are clean in person and in habits, and this must be followed up by an inspection of the premises where it is kept until sold so that it can be kept clean and free from contamination; secondly, to assist and educate the producer. This requires considerable study and he must be a thorough sanitarian; he must make a study of refrigeration and must also have a knowledge of veterinary science, chemistry and microscopy. To do work of any value he must make himself familiar with all phases of food manufacture. This requires considerable study as new articles of food are being placed on the market every day, and for every one that gains popularity many imitations spring up, and to be able to gain the confidence of the trades people, he must be able to talk intelligently and give advice on the products they handle.

In our cosmopolitan Canadian cities many strange kinds of food are on the market. The inspector must make himself familiar with all these, otherwise he would be committing grave mistakes and would be likely to condemn as unfit for food such articles as sauer-kraut, Limburger cheese and Chi-

nese eggs and fish, simply because they did not appear wholesome to him.

He will find on starting into work in any municipality many insanitary conditoins that are not due to any wilful neglect on the part of the trades people, but rather to ignorance of hygienic principles and it will be his duty to have reforms instituted. He must always be able to give a sensible reason why he requires certain alternations, and by so doing he will gain the respect of the trades-people and his work will be conducted with a minimum of friction.

In the city of Winnipeg no person can open premises for the storage, sale or preparation of food without first obtaining a permit from the health office. The food inspector visits the premises when the application is made and endeavors to assist the applicant in the layout of his premises to the best advantage of his business, not forgetting the hygienic requirements. We find that this is an excellent law, as many places which are absolutely unsuitable are not permitted to open, and the advice of the inspector is very much appreciated by the trades people. In fact our Winnipeg tradesmen are willing to co-operate with health department in every improvement for the betterment of conditions with very few exceptions. No foods are exposed for sale in Winnipeg outside stores or in open windows or doorways.

Meat inspection, to be efficient, means ante-mortem inspection, the methods of slaughter, and post-mortem examination. By these means only can meat, which is unwholesome as a result of pathogenic organisms, animal parasites or disease which existed in the body before slaughter be excluded from sale.

The object of ante-mortem inspection is to exclude all animals from slaughter that show any symptoms of disease or parturition trouble so that they can be slaughtered separately from healthy animals, and sanitary precautions taken to avoid contamination.

Inspection of methods of slaughter insures that animals are slaughtered under the most humane and sanitary conditions.

Post-mortem examination enables the inspector to judge which animals or parts of animals are fit for food and which should be destroyed.

The Dominion Government have established a branch of meat inspection under the very able supervision of Veterinary Director General Rutherford, and all abattoirs doing an export or inter-provincial trade have to have a government inspector or else their trade is restricted to their own province.

The greatest difficulty we have to contend with is meat shipped in from outside the city, the viscera and intestines removed, and only very crude examination can be made, although I have been able to detect cases of tuberculosis by cutting into the lymphatic glands. We also seize meat when the pleura has been stripped.

This inspection of the whole carcasses must be followed up by frequent inspections of shops where meat is sold or where it is liable to become contaminated by insanitary conditions, or decompose through being kept too long, or adverse weather conditions.

In Germany there are institutions known as Friebanks or municipal shops where meat, which would otherwise be condemned for such causes as tuberculosis and cysticercus is cooked under official inspection at such a temperature as to render it harmless, is sold to the public under declaration. By this means an enormous quantity of meat is put to a valuable use which would otherwise be destroyed. These Friebanks are also to be found in France, Italy and are of great benefit to the poorer classes. No injustice is done to any person in the introduction of Friebanks as every person is free to buy meat from it or not.

Fortunately, with one exception of tuberculosis, Canada is very free from diseases of food producing animals when compared with other countries in which I have had experience, viz.: Great Britain, Africa, Argentine and the United States.

There have been outbreaks of Anthrax, black quarter and hog cholera, but these outbreaks have been practically stamped out by the efficient work of the officials of the Dominion Government Health of Animals and Live Stock branch.

The most important feature of municipal food inspection is the inspection of dairies from which milk is supplied to our cities. On taking over the dairy inspection in Winnipeg, I realized that the cause of much of the unclean milk was due to ignorance on the part of the dairymen, rather than their wilful negligence. We called a meeting of dairymen in several districts and gave them lectures on the cause and prevention of tuberculosis; the sanitary construction of cow barns and milk houses; the proper feeding of cattle and other subjects of interest to them in their business. After these lectures these matters were thoroughly discussed and as a result a vast amount of improvement has been brought about, and with very few exceptions we have always found the dairymen

willing to learn when these matters were fully explained to them.

When an application for a dairy is received, the premises are inspected and if found satisfactory a permit is granted. If, on the other hand, the premises are insanitary, we supply the dairyman with a plan of a new building suitable for his requirements and pocket. During the course of construction of the said building, the dairy inspector visits the premises several times and oversees the building. The city supplies the dairymen with gravel and cement at cost price and as a result of these co-operative measures, we have a large number of first-class dairy barns, and many more are intending to build as soon as their means will allow.

The question of tuberculosis in dairy herds is a very serious one, which can only be properly handled by a well planned campaign of education throughout the country.

We have three dairymen who had their cattle tested and bore the whole brunt of the loss. These men have since made a great deal of money as the department has helped them to advertise their products. This is a hopeful sign and an encouragement to others to do likewise.

The municipal food inspector cannot be too careful in his judgment of food stuffs, for, were he proved in the wrong, the owner would make him refund the value of the goods destroyed and then sue the city for heavy damages for injuring the reputation of his business.

In conclusion I would say that the control of food supply is of national importance. The strength of a nation depends on the health of its members. Food products are an important factor in a nation's commerce and it must be the earnest desire of all authorities to so conduct the inspection, that, whilst safeguarding the public, it does not oppress the industries concerned.

What the Other Fellow Thinks

Cheese in Theory and Practice.

A dispatch from Washington says that the Department of Agriculture has issued a publication giving forty-one different ways of preparing cheese and cheese sauces. The pamphlet also highly recommends cheese as a regular food, particularly as an occasional substitute for meat.

We have heard this sort of thing before. Everybody has. Every now and then some authority on something or other rises to declare with great earnestness that cheese is the greatest food in the world and that if people would only eat more of it they would be much healthier and happier.

This same authority generally goes on to point out that the food value of cheese is very high; that the popular idea that it is indigestible is all a mistake, since scientific experiments show that cheese is as readily digestible as a comparable quantity of meat; also that it even tends to aid the digestive secretions instead of interfering with them.

And, as a general rule, one has an acquaintance with an unreliable stomach who hears this vindication of cheese gladly and resolves to get well and strong on it, according to the authority's directions. The fact that he is extremely fond of cheese but has been afraid to eat it for a long time causes him to embrace the theory favorable to cheese with more than ordinary zeal.

After a bit one meets that same friend by chance. He has a yellow, leathery skin and a voice that seems to come from somewhere very far away. His eyes have a greenish sort of hue and are considerably further back in the head than formerly. He seldom smiles and his movements are painfully slow and deliberate. In brief, he looks like a hookworm specimen from the Arkansas swamps.

How is he? "Oh, only tolerable," is the answer. "Don't seem to be able to get up any energy. Seems to want to sleep and sit in the sun all day. Bad taste in the mouth. Complexion is getting yellower all the time, too. Must be biliousness. Can't think of anything else." Is he still sticking to the cheese diet? No, it didn't seem to chime exactly with his constitution.

So familiar is the case of the man who gets off on the cheese theory at full tilt with disastrous results that it seems to be necessary to distinguish between cheese as theoretically considered and as practically consumed. Theoretically, cheese seems to be everything that could be desired in the way of food. Its virtues are so many that a single article would not be long enough to hold a tithe of them.

But practically cheese seems to fall from its high theoretical estate. In spite of all the recommendations of science, cheese

can stir up more trouble in the mind and stomach of a peaceably disposed citizen than even a hot mince pie hastily consumed. We make this statement without reservation because it is a fact of human knowledge and experience that no department experiment can possibly overturn.—*Chicago Inter-Ocean*.

Another Color Question.

Dairy interests represented by several national organizations are valiantly battling in the defense of butter as against oleomargarine. The bone of contention, says the latest circular, is the color question. For a quarter of a century the butter men have been contending against the imitation of butter and they contend that the oleo interests have been struggling during all that time to get Congress to permit it to color their product as they see fit.

It is a matter of course that, except for the difference in size of interest, the oleo men have just as good a right to get to market with their goods as the butter men, but it is not disputed anywhere now that the oleo men at one time sought to deceive buyers by coloring their product in imitation of butter.

One might think that a buyer would very soon be undeceived because he had only to taste the product in order to be satisfied that he had been sold one product for another and yet charged a higher price for a lower valued product. But that question has never been left to the buying public.

It has been the law for a good many years that oleo should not be sold in imitation of butter and that no matter what the size of package it should be marked on paper or otherwise for what it is, that it should be sold over and above board. The great trouble now perhaps between interests is that the sale of oleomargarine has been advanced until it runs up into hundreds of millions of pounds and the leading grocers in all cities are handling it in proportion to the demand for it. That is one effect of high prices.

Every business is entitled to be protected against those who would encroach upon it, by selling goods falsely marked or made in imitation. Butter of natural color is not yellow; at least it is never as yellow as the favorite colors for it, but it had been subject to coloring as a practice for generations before oleo was invented and so may claim the exclusive privilege of coloring as an established part of the business.

As long as one product is quite as wholesome for food as the other, the business of the law is to protect people against buying one for the other through deliberate imitation of one by the other, so that lack of identity cannot be detected at sight. It is a tremendous temptation arising from the huge profits of counterfeiting that make the oleo interests take wide chances oftentimes in the sale of their product.—*Buffalo News*.

Fair Play for the Packers.

Everybody wants fair play. He that wants it should give it. Have the packers at Chicago had fair play? They have been accused of making too much money. The popular idea, inspired by the muck-rakers, is that these great business concerns are close corporations controlled by a few men. On January 1, 1912, there were more than 18,000 partners—stockholders—in the corporations of Swift & Company. It paid during the year a dividend of 7 per cent. To insure future earning at this rate, it is said, it is essential that established trade be retained and new trade secured. It is not alone this large number of stockholders that illustrates the public nature of such an enterprise. This company had over 27,000 satisfied employees on its payrolls during 1911, more than 3,000 of these holders of stock in the corporation.

Unjust attacks upon such an industry do widespread harm. A Texas cattleman not long ago was dissatisfied with the price he had received for 279 steers sold to Swift & Company—\$4.60 per hundred—in comparison with the prices paid by city people for roast beef and steaks. He expressed his feeling publicly. Swift & Company examined the detailed account of this particular lot of cattle and found that it was sold in twenty-five different cities, ranging from Boston in the northeast to El Paso in the southwest, from New Orleans in the south to Buffalo in the north, and in a variety of communities, from Greenville, Miss., with some 9,000 population, to New York with its millions. The company paid for these 279 steers, total weight 332,800 pounds, at \$4.60 a hundredweight, the sum of \$15,308.80, and sold 187,765 pounds of the total as dressed beef at \$6.583 per hundredweight, thus losing on this 187,765 pounds \$2,948.62.

Swift & Company paid cash for the animals, dressed them in Fort Worth abattoirs, kept the carcasses in coolers forty-eight hours, loaded them into refrigerator cars, transported them, charges prepaid, thousands of miles to various parts

of the United States, sold them for the average price stated and sustained the loss set forth. But there was no loss on the complete transaction, for there were the by-products. Swift & Company, on the hides, hoofs, horns, etc., of these steers, realized simply a profit of \$1.26 4-5 on each animal, or less than one-fifth of a cent on each pound of meat! These facts, with others, are set forth by this corporation. Are the packers robbing the people—the consumers—and making too much money? If the facts are not as they state, will somebody challenge them?

Every great business enterprise dealing with animals, oil or other natural products finds its chief—if not its only—profit in the by-products it can evolve or discover, thus preserving to the race a thousand things that formerly were regarded as waste. And in these days of competition—for there is competition in everything—it is this ingenuity forced by conditions that prevail that makes for public benefit.—*Leslie's Weekly*.

Egg Prices and Cold Storage.

We venture the assertion that if the decline of 6 cents per dozen in the jobbers' prices of eggs proves to be permanent, as is probable at this time of the year, the retail price will go down in proportion. The retailers have no combination that will enable them to maintain the retail prices at a level higher than the natural parity with wholesale prices. We are on the verge of the increase in the supply of eggs direct from poultrymen and farmers. If the boycott diminishes the demand, the price will fall the sooner and further.

We hazard the further prediction that if the cause of the high prices is impartially investigated, it will be found to be due to two things. One is the prolongation of severe winter weather checking the production of fresh eggs. The other is the comparatively small amount of eggs in cold storage. The price of new-laid eggs in December and January was not very much above the usual rates at that season of the year. But the difference between this year and last is that there was a heavy stock of eggs in cold storage, and when January and February proved mild and open the owners of the cold storage stock dumped it on the market, breaking prices to a level below what is usual at that season. This year there has been an unprecedented spell of cold weather, summing up a greater deficiency of temperature for the first six weeks of the year than has been previously on record.

Whether it was due to the attack on cold storage or to the losses of the cold storage operators last winter, very much less eggs were bought and stored during the summer months. The consequence is that eggs were cheaper during the summer and higher during the winter than the average. While it is indisputable that the storage of eggs for a length of time that makes them unsanitary should be prohibited, it is no less plain that the effect of cold storage on the market within proper limits is to steady the price in summer, when eggs are abundant, and to moderate the high price in winter, when they are scarce.—*Pittsburgh Dispatch*.

The Cost of High Living.

While the cost of living is a problem of increasing perplexity the world over, it is not always remembered that the ease upon which this age insists is a factor in the result. Even the added cost of having every necessity of life brought to the door as a matter of daily routine, or hurried to the home on telephone request, is of itself considerable. Generally speaking the householder now pays scores of people for services which his forbears performed for themselves; and and so it is not only the high cost of living nowadays and the cost of high living which makes the world feel poor, but the price paid for easy living must also be taken into account. But perhaps if people were still content to live as simply as their fathers did, life would be too placidly easy in this age of improved machinery and methods, and there would be no struggle to bring out much of all that is most admirable in mankind. Life might be as vegetative as it still is in the tropics; for it is not by accident that the civilized belt of earth has always been just below the line of northern snow.—*Rochester Post Express*.

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Enforcement of State Food Laws

III. Official and Unofficial Reports.

By H. R. Wright, Former Dairy and Food Commissioner of Iowa.

Previous articles in this series have given a table showing the food law violations and the prosecutions in seventeen of the principal states as given in the latest available reports of the respective food commissioners, and have discussed the use of chemicals in foods as shown by the reports quoted, and the alleged adulterations of candy. As previously stated, it is impossible to make such a table and to classify these reports all on the same basis because, in the first place, the laws of the various states do not use the same language in defining offenses, and in the second place, the commissioners do not all follow the same plan in stating results. It is possible therefore for the captious critic to pick flaws in this table by ignoring the facts just stated. Of course such criticism is expected from those whose only claim to fame is their ability to break into print with a scare story about the awful adulterations of foods. I cannot expect this series of articles to be popular with such persons, for they are reformers "for revenue only" and such immaterial things as the facts of the case are no limitation upon them.

What are adulterations of foods anyway? We hear a lot about them. We are told that they are very numerous; that most adulterations are by the use of chemicals deleterious to health; that anywhere from twenty-five to fifty per cent of our food is adulterated. It is quite usual to compile a statement from some chemist showing a large number of analyses during a series of years and to make it show that a long list of foods is adulterated. A recent criticism of my figures comes to hand and illustrates the kind of decep-

tion that is practiced upon the public who have no time or facilities for checking up the statements of pessimistic food enthusiasts. Mr. John Phillips Street, chemist of the State Experiment Station in Connecticut, seems to have his temper aroused by the figures which I quoted from the official report of the food commissioner of that state, and he proceeds to give the figures from "my records" as he frequently says, and he indicates that his "my records" convict the writer of having garbled the figures of Connecticut food law violations. Ignoring the gentleman's ill-tempered personalities, let me say that the food commissioner's report does not carry the name of Mr. Street as one of its officials and so, of course, I was densely ignorant of his existence, and I supposed, and still suppose, that the food commissioner is the real authority on food law violations in that state. Mr. Street makes out a good case for himself by claiming that in the last four years he has done a lot of work and found a lot of adulterated foods. I beg to call attention to the fact that it is not the duty of the chemist in his state to tell the food commissioner just what are and what are not violations of the law and I therefore prefer to take the commissioner's figures as the information that is authentic and beyond question. As usual with such presentations of the awfulness of the situation, the figures given are so mixed that it is impossible to make them balance in any sort of fashion or to get any intelligent idea of just what the chemist found, or what meaning really could be deduced from his findings, or whether indeed he is telling the exact facts. But his real conclusion is that chemicals are

used widely in foods. He makes a list of twenty-seven chemicals that he has found. Five of them are mere impurities in common salt. Alcohol in soft drinks is called a "chemical." Sucrate of lime does not sound near so bad as a chemical when we know that it is lime water and sugar. Coumarin is a "chemical adulterant" (40) and so is "tin" (89), synthetic flavors (67), coal tar colors are also chemicals (189), though the law of Connecticut does not prohibit them and the food commissioner does not prosecute any one for their use. Of course the synthetic flavors are sold in every state in the union without any interference, and equally of course the tin was an impurity in the minutest possible quantities and derived from the cans in which the investigated products were preserved. But by this kind of padding that writer builds up a considerable case against the manufacturer of foods. This critic also alleges that I have failed to include in my figures from Connecticut 106 violations of the vinegar law. No violations of the vinegar law are set forth in the report of the commissioner. He only hints at the existence of such violations without specifying a single case. It follows that the statement of my critic is either wholly false or that he is comparing his "my records" with the official records of the commissioner, and in either case the object is to deceive the reader. This sort of deception has been going the rounds of the press for a good many years. It consists of generalities, not founded upon published reports of any kind, and depends wholly upon the unsupported word of the writers of this kind of fiction. The authors of such fairy tales are not just exactly intentional prevaricators, but they are afflicted with a mild kind of lunacy to the extent that they really believe what they say, at least part of the time. I have no part in any quarrel between Mr. Chemist Street and Mr. Commissioner Potter as to the effectiveness of the enforcement of the Connecticut food laws, but I prefer to take the official report of the commissioner for my information rather than that of the chemist who is wholly without authority or responsibility to the public or the people of Connecticut. Also the statements of the commissioner sound quite truthful. In two years he made prosecutions on unbranded renovated butter, extracts, adulterated lard, milk below standard, oleomargarine, and short weights. So that at least the commissioner does not believe that the food condition in Connecticut is so very bad or that chemicals are generally present in foods.

Referring to the table given in the February issue of this magazine, it will be seen that but thirty-one articles of food are found to have been the basis of action by the food commissioners of the seventeen states. A very few of the terms used are general and might be subdivided in the interests of completeness. If one starts to make up a list of common foods that are *not* included in this rather complete list of adulterated foods he will be surprised both at the length of the list and at the volume of foods included. In the table given he will not find such articles of foods as bread and butter, meat and potatoes, sugar and salt, fruits and vegetables, fish, nuts, preserved dried fruits. Nine of the foods mentioned are the cause of less than ten prosecutions each. These are "cereals, cheese, cocoa and chocolate, coffee and substitutes, honey, jams and jellies, spices, sugar or syrup, not maple." The ninth one in this class is "milk with chemicals."

The conclusions of the table may be expressed as

follows, prosecutions not based upon real adulterations:

Weights (short or not stated).....	229
Unsanitary conditions of foods.....	487
Meat (rotten or diseased).....	171
Eggs (rotten).....	59

946

Prosecutions counted twice under "candy" and "coal tar color".....	165
Remaining prosecutions listed.....	3,578

Of this number (3578)

40. % are Milk (skimmed or not standard)....	1,430
20.6% are Oleomargarine	739
6.2% are Coal tar color.....	223
4.6% are Beverages (soft).....	166
4.3% are Ice Cream (not standard).....	155
3.6% are Extracts	134
3. % are Hamburger	105
3. % are Vinegar	106
14.7% are 21 items, aggregating.....	520

It is folly to say that the prosecutions made are not the measure of the amount and kind of adulteration found by the food commissioner. Where else shall we find exact statement of the kind of food law violations or the successful enforcement of the law? Shall we accept the statement of the chemist that coal tar colors are harmful chemical adulterants in candy and a hundred other foods, or shall we note the fact that neither any chemist nor any food commissioner ever had the nerve to take a case to court to try to prove the sale of adulterated food and that it was adulterated by the addition of a harmful coal tar dye? Shall we accept the statement of the chemist that he discovered a couple of hundred samples of adulterated butter, or shall we read the report of the commissioner which says that the samples were all oleomargarine that was sold as butter, and that there practically is no such thing as butter adulterated with any foreign material of any kind? The test of a food law, the test of a food law interpretation, is the test in court. A good many technical violations may be so trivial that the courts would not spend time bothering with them, nor inflict any penalty if conviction were secured. Such may appear in the list of the chemist, but because of their trivial character they cannot be used as a basis of conclusion in regard to the food situation generally. For example, the report of the commissioner of Wisconsin shows fifty-seven cases of the use of saccharin and only seventeen prosecutions. This because the law of Wisconsin forbids the use of saccharin and not because in the quantities ordinarily used it is in any sense harmful or deleterious. When it was discovered that one or two firms were using saccharin in pop in the state of Wisconsin, it would have been possible to pick up hundreds of samples of their product, but I doubt whether the good sense of the commissioner would have permitted him to make more prosecutions than he did, and certainly such additional discoveries would not have established anything more in regard to the manufacture of pop than did the few cases reported and the few prosecutions made. Responsibility brings better judgment and we can turn with confidence to the commissioner's list of real prosecutions and get at least some idea of the food situation in his state.

The word "adulteration" does not apply to nearly all the prosecutions. Speaking generally, many foods are "adulterated" when they would be the reverse if the makers had put upon the packages the proper labeling. A mixture of buckwheat flour with wheat flour is adulterated, but its sale is legal everywhere if the facts are stated on the label. Other foods are

"misbranded," because perhaps the labels do not truthfully state the facts of the contents of the package. They would be legally salable if the labels were proper. Still others are violations only because the statements required by law are not present, net weight is not stated, or incorrectly stated, or size of type is not as prescribed by statute. Still other violations are by reason of natural decay, as the sale of rotten eggs, or by reason of uncleanly places of manufacture. The more one studies the kind of food law violations that the commissioners think serious enough to make the basis of a prosecution, the more one learns that adulterations of food, however much they may affect our pocketbooks, have little or nothing to do with our health.

Baking powders are the subject of prosecutions only because required labels are not properly displayed upon the packages.

Butter is almost never adulterated in any way, but renovated butter sometimes fails to bear the labels prescribed by the laws of a good many states. Minnesota found one sample of butter adulterated with lard; a few cases are made for the sale of butter containing more than the maximum of 16 per cent of water. The large majority of butter prosecutions is for sale of renovated butter without the labels required by the law.

Soft drinks are peculiarly subject to the use of saccharin, and are sometimes misbranded as when they are represented to be made from fruits when they are really fictitious.

There have been no prosecutions made for illegal sale of alcoholic drinks, except in the case of fictitious or colored wines.

Besides the use of copper in canned peas, and sulphurous acid in a few cases relating to such products as Maraschino cherries, canned goods are sometimes misbranded. The usual run of canned goods—canned fruits, canned meats, canned vegetables—are practically free from adulteration of any kind.

As shown by the table the number of prosecutions in regard to cereals, cheese, cocoa and chocolates, coffee, jams and jellies, spices and sugar syrups is very small.

Extracts get the attention of food commissioners for the reason that there are many weak in strength, misbranded, short weight, or artificial. This does not indicate that extracts as a class are very badly adulterated, because there are thousands of extract manufacturers who do little business and it is this class of people who put out the extracts that get into the food commissioner's lists.

Ice cream violates the law in the tables shown because it lacks some of the butterfat required by the standards adopted by the states.

Lard is adulterated by the addition of beef fat or cottonseed oil or both, or a substitute for lard is sold under the name of lard. No other occasion for violations is discovered.

Meat is not at all adulterated with chemicals as shown by the seventeen states reported, but a few cases of rotten meat, or diseased meat, have been reported. The 137 cases reported in New York relate altogether to the shipment of "bob" veal.

Milk that is below the standard makes up more than 40 per cent of all prosecutions undertaken. There is almost no positive adulteration of milk other than by watering and by skimming.

Oleomargarine is the subject of special laws in practically all the states and, while these laws are dissimi-

lar, in general they require the labeling of the package and the display of signs where oleomargarine is sold or served. Violations of such restrictions make up more than 20 per cent of all prosecutions.

Olive oil is adulterated infrequently with cottonseed oil; oysters sometimes have excess water; sausages are put up with cereal in a few instances without being so labeled; maple syrup still gets mixed with sugar syrup and vinegar is sometimes not what it is alleged to be.

It is not the purpose of this article to claim that the situation in regard to American foodstuffs was always as it is now. It may be possible to show that worse conditions by far existed ten years ago. I think such a thing is quite probable. But the figures given from official sources seem to indicate that with all the diligence of trained inspectors, the number of food adulterations discovered, so far as they might affect the health, is extremely small, if we confine the discussion to the use of chemicals or other ingredients actually added by the maker of the foods.

There is, however, a more serious side to the food situation that deserves a lot of the energy and attention that enthusiasts are now wasting upon the fictions already attacked. The sanitary side of food production has received but little attention from anybody, though a start in the right direction has been made. The food commissioners of the United States have done brilliant service in almost eliminating real adulteration of foods, and there remains a great work for them to do in creating a sentiment that may be crystallized into higher ideals in the handling and manufacturing of foods. Some states have already done something along this line, and without doubt many sanitary laws will be enacted in the sessions of the state legislatures next winter. The fourth article of this series will cover what has already been done in the seventeen principal states along the line of clean foods and clean food practices.

OFFICIAL ROUTE TO THE CONVENTION.

The Northern Pacific Railway has been selected as the official route to the convention of the Association of State and National Food and Dairy Departments at Seattle, from July 9 to July 12, 1912.

This route will be one of the most suitable for the eastern delegates and the majority of those going from southern and western points.

Special service has been arranged from Chicago, which will include a side trip to Yellowstone Park. Delegates not desiring to make the park trip will have special service enabling them to join the party en route.

Information concerning the trip may be had from A. H. Jones, Illinois State Food Commissioner, Manhattan Block, Chicago, Ill., or from Mr. A. C. Odenbaugh, City Passenger Agent, 144 South Clark street, Chicago, Ill.

PROFESSOR REMSEN RESIGNS AS HEAD OF UNIVERSITY.

Professor Ira Remsen, chairman of the Referee Board of Consulting Scientific Experts, has resigned the presidency of Johns Hopkins University, Baltimore, Md., a position he has held for ten years. In his letter of resignation Professor Remsen stated that his action was inspired by a desire to engage in the more congenial work of scientific research.

More Recent Investigations of Benzoic Acid

Its Determination, Preservative Action and Admissibility for Use

By Prof. K. E. Lehmann, Director of the Hygienic Institute, Wurzburg.

(Translated from the "Chemicker-Zeitung," November 28, 1911.)

PART II.¹

I now come to the most important part of my work—a critical summary of the three detailed investigations on the effect of benzoic acid and of benzoates on man which have been carried out during the last few years and which now furnish us that broad basis, which I have always desired, necessary for the formation of an intelligent opinion. First there are two great works from the American Department of Agriculture; one carried out by H. W. Wiley² in 1908, the other by a commission, under the chairmanship of the famous chemist Ira Remsen, consisting of the three well known American scientists, Professor Russell H. Chittenden of Yale University, Professor John H. Long of Northwestern University, and Professor Christian A. Herter of Columbia University, New York. It seems strange that a great government should publish two books, one right after the other, dealing with the same subject-matter, and we seek in vain, in the second large volume of 761 pages, for a word of explanation of this surprising fact. Wiley's work is simply ignored in the publication of Chittenden, Long and Herter, as if it had never existed. From this it may be concluded at once that the results or conclusions of Wiley did not seem, to the second commission, worth discussing. This is so much the more surprising in that Wiley, under the authority of the Department of Agriculture, has, for years, been publishing similar investigations on boric acid, salicylic acid, etc. Under these circumstances I had at first thought of leaving Wiley's work entirely out of consideration, but since Dr. V. Gerlach of Wiesbaden, in the third³ of the detailed publications mentioned above, expresses his regret that he had access to only a short abstract of Wiley's investigation, a discussion of the original, which now lies before me, will be appropriate, especially as the work will become even more difficultly accessible in the future.

Wiley studied the effect of benzoic acid on six persons and that of sodium benzoate on six others. In each case a ten-day period without the preservative was followed by a five-day period with 1 gram, then by periods of equal length with 1.5, 2, and 2.5 grams, each, of the preservative, and finally by another ten-day period without the preservative, i. e., forty days, in twenty of which benzoic acid was administered. Above all it is to be regretted that the preparations were given in capsules and that the small quantities (0.25-0.5 gram) which, in practice, are most important were not administered, as the minimal dose was 1 gram; and finally, that the experiments were extended only over a relatively short time. As far as concerns the results, I cling to the good custom of not doubting an investigator's facts and analytical data; only the basis and logic of the conclusions are here discussed. From the experiments, which are reported carefully and in considerable detail in 250 pages, Wiley concludes some very disadvantageous things for benzoic acid.

He finds: "It is evident that the use of benzoic acid, either as such or in the form of sodium benzoate, is highly objectionable and that it produces grave disturbances of the metabolism and health (irritation of the stomach, nausea, headache and, in a few cases, vomiting). So much the more importance is placed on these symptoms as they were observed in healthy men, well and carefully fed. All the test persons showed a distinct loss in weight and all the more or less marked changes in metabolism shown by investigation of the urine and feces were always of such a nature that they could never be regarded as a favorable change." In my opinion, this sentence might as well read: Careful investigation of the urine, feces and metabolism did not show a single symptom from which a disturbance due to the partaking of benzoic acid might be deduced. That the normal condition could not be improved by benzoate acid, as Wiley seems to require, is not surprising. As Wiley is thus far the only investigator who, supported by comprehensive experiments, has formed a condemnatory opinion of benzoic acid on toxicological

¹Part I (Chem. Ztg., 1911, pp. 1297-9) is a summary of the articles dealing with the isolation, qualitative and quantitative determination, natural occurrence in plants, preservative action, use and toxic effects of benzoic acid.

²J. Soc. Chem. Ind., 28, 67 (1909).

³Physiologische Wirkungen der Benzoesäure und des Benzoesäuren Natrons. Verlag von H. Staadt, Wiesbaden, 1909.

grounds, I have taken the trouble to criticise his work somewhat more closely and to examine the value of his arguments. The very thorough examination of the urine, which is reported in many tables, showed nothing special. Who could lay much value on the fact that in the benzoic acid periods the amount of solid substances in the urine increases 2.3 grams, i. e., from 55.5 to 57.8 when, in the first place, the diet is not strictly fixed and, secondly, the addition of $\frac{1}{2}$ gram of benzoic acid per day almost completely covers the increase. The relation of sulphur to nitrogen, sulphuric acid to nitrogen, and phosphoric acid to nitrogen remained entirely unchanged; with the arbitrary diet the variations of 1-3% either way, of the values are unavoidable. The alkylsulphuric acids remained perfectly constant, the absolute amount of urinary sulphur changed only to an insignificant degree explainable by the method of procedure; a decrease of neutral sulphur from 14 to 12.4% in the benzoic acid period and to 11.1% in the after period seems to be proved, while on the other hand the total sulphur shows an increase from 85.9 to 87.7 and 88.9%. But anyone wanting to draw any conclusions from this might just as well, instead of indicating, like Wiley, an increase of oxidation, infer that the oxidizing power of the body is distinctly increased a little by rather large doses of benzoic acid and increases still more after the excretion of the benzoic acid, a sign of an especially powerful cell activity. It is an interesting fact that the separation of benzoic acid as hippuric acid does not take place very quickly, but that an after period following a rather prolonged benzoic acid diet still shows increased hippuric acid. The microscopic investigation of the urine—the method is not described in detail—was made six times in all for each of the twelve persons studied—once each in the fore and after periods and four times in the benzoic acid periods. The results are represented by numbers: 0=nothing, 1=very little, 2=little, 3=considerable, 4=much, 5=very much. The following substances were sought for: crystals of uric acid, oxalates and phosphates, amorphous phosphates, epithelial cells and leucocytes, hyaline cylinders finely granulated and coarsely granulated cylinders, mucous cylinders mucous fibers. The numbers were added for the twelve persons and divided by twelve, and the values so obtained compared in percentages. According to the mean values most of the organized elements are increased somewhat; leaving out the crystals, the leucocytes and the finely and coarsely granulated cylinders are somewhat increased, the hyaline cylinders somewhat diminished and the mucous fibers hardly appreciably increased. Considering how strongly a 2 influences the 1's and 0's which are found in greater number, it is preferable to consider more closely each individual constituent of the six series. When this is done, it is found that, excepting the mucous cylinders (increase of 50%), nothing at all remains of all the construed increases. But as the mucous fibers do not markedly increase, I set no importance on the increase of the mucous cylinders. Wiley, however, concludes that there is a slight tendency towards an increase of renal activity during the benzoic acid periods. This "slight tendency" to cause everything that is possibly bad is construed everywhere that Wiley can say nothing definite. In the feces nothing remarkable was found. On an average, in the experiments with the benzoic acid the feces were a trifle drier, in the benzoate experiments somewhat damper, during and after the administration of the preservative than before it was given.

That the majority of Wiley's twelve persons should have lost 0.5-2.0 kilograms on a freely chosen diet is very remarkable, and we should much like to learn more as to the principles on which the amount of food was measured. The amounts of dry substance, fat, nitrogen and calories daily taken in the individual periods vary not inconsiderably—with a "faint tendency" in most cases, to decrease in the course of the forty days—which alone explains the slight decrease in weight. We do not learn why a greater regularity in the taking of food was not striven for. I reproduce some particulars concerning one person: Test person 1 (C. W. N.) had nothing particular to complain of against benzoic acid, but found that his strength decreased markedly, so that he could hardly do his work. At the same time, however, it is stated

that this person was often very hungry, that the abundant and varied food with 4,000 calories was not sufficient for him. On the other hand, it is seen from page 1090 that during the fore period this person partook of 606 grams of dry food, on the average during the total benzoic acid periods, of 590 grams, and in the after period, of only 567 grams. Why more food was not given him remains incomprehensible, as he had already decreased 0.5 kilograms in weight in the second five-day period and 0.3 kilogram in the first five-day benzoic acid period and was hungry! In this record I see nothing but decreased body weight and consequent feeling of weakness, probably increased by suggestion, resulting from a somewhat too limited consumption of food. To other persons was given 1% of the body weight in dry substance, to No. 1 only 0.87%. On page 1166 we learn to our surprise, that Person 1, who daily took about 13-14 grams of nitrogen, daily gained (in spite of decrease in weight) 0.53 gram in the foreperiod, 0.39 gram in the benzoic period, and 1.41 gram in the after period, and therefore apparently became poorer in fat and richer in albumin. And we learn further that Person 1 did not at all stand alone in this respect. In spite of decreases in weight and disturbances of metabolism of subjective nature, five of the twelve persons increased, seven decreased, in nitrogen; in the average of all twelve experiments there was even, in all the periods and sub-periods of the 40-day test, a daily increase of 1.2-1.5 grams of nitrogen. The nitrogen was used to the best advantage; on an average for all the test persons, 7.26% was excreted in the fore period, 7.44 in the benzoic acid period and 8.16 in the after period. The phosphoric acid metabolism was hardly influenced, but it is true, as Wiley brings out, that during the benzoic acid period the phosphoric acid increases a trifle (about 3%) in the feces and decreases by about the same amount in the urine, in the after period, the increase in the feces and the decrease in the urine were somewhat more marked. Wiley draws no conclusions from this. This might be considered as a poor utilization of the phosphorus of the food, but greater guarantee as to the amount and nature of combination of the phosphorus compounds given would be necessary—that the number of blood corpuscles would also show variations was clear.

Their number was greatly raised, as compared with the fore period, after two administrations considerably decreased, of benzoic acid, as compared with the fore period, after three administrations; about the same as in the fore period after one administration; increased after three doses of sodium benzoate; decreased after two doses; not determined after one dose.

The general average for all twelve persons was as follows:

	Red Corpuscles.	White Hemoglobin, Corpuscles.	Pct.
Fore period	5,082,273	7,433	96
Benzoic acid period....	5,099,583	7,331	96
After period	5,255,000	6,641	97

No conclusion, therefore, for or against benzoic acid can be drawn from these data, yet Wiley speaks of a "tendency" to diminish the red corpuscles which benzoic acid seems to have.

In my honest opinion, Wiley's publication is lacking in every proof, every objective proof, of the harmfulness of benzoic acid, and from the voluminous metabolism investigations which Wiley has so pitilessly used against benzoic acid exactly the opposite conclusion may be drawn, that, at most, each and every entirely subordinate fact (I have carefully reproduced them all above from Wiley's publication) remains somewhat doubtful in its significance. From Wiley's report on subjective symptoms of digestive disturbances by $\frac{1}{2}$ gram quantities of benzoic acid in wafers, no conclusions can be drawn; even with this method of procedure, so ill-adapted to our problems, the data stand too isolated in the literature. They give the impression that suggestion played a considerable part in them, for there is no doubt that in Wiley's laboratory preservatives are considered with extreme mistrust and antipathy and that the test persons should imbibe some of this antipathy is easily conceivable. I surmise that this was also the general impression of the American authorities and that new investigations by Chittenden, Long and Herter were instituted to critically test Wiley's results, which were contrary to all observations so far made in the laboratory and in practice.

Although the volume of analyses and observations reported by Wiley and their evident cost is considerable, the extent of the work of the other investigators is surprising. This voluminousness of the work, especially the numberless tables, makes it difficult to enter very much into the details

of it. Moreover, it is really a question of three independent pieces of work. The three gentlemen, entirely independently of each other, but following a carefully preconceived plan, each subjected six, six and four young physicians and chemists, respectively, to metabolism investigations lasting not less than four months. There were thus $16 \times 120 = 1,920$ test days. On 40 of the 120 days, i. e., on 640 days, exact urinary analyses were made. The benzoic acid was given in the following manner: In a fore period of 10 days no benzoic acid was given, then for two months 0.3 gram was given daily, then none for 5 days, 0.6 gram for 7 days, 1 gram for 7 days, 2 grams for 7 days, 4, 6 and 10 grams respectively for 7 days, and finally for 10 days no benzoic acid was given (the individual experimenters worked a little differently); the benzoic acid was mixed with the food and given as sodium benzoate. It must also be pointed out that the test persons were not exclusively of especially robust health; in fact, some of rather moderate constitution were taken.

In the first pages of the work is given, briefly, clearly and concisely, what interests us most—the conclusions of the three investigators. "Sodium benzoate in small doses, 0.5 gram mixed with the food, is without toxic effect and does not disturb health. Sodium benzoate in large doses, up to 4 grams mixed with the food, showed, upon investigation, no harmful effect in the general sense of the word. In some directions were observed small changes in certain physiological processes, the exact significance of which changes is not known." According to the investigations, the mixing of sodium benzoate in smaller or larger doses has no unfavorable or deteriorating influence on the value of such food. In this series of experiments, also, the test persons were not in exact nitrogen equilibrium. They were allowed to enjoy at will, within certain limits, quite complicated, extremely varied and dainty foods, the food being merely weighed and analyzed. The daily consumption of food, which, in Germany in such experiments, we keep as nearly as possible uniform in nature and equal in amount, varied not inconsiderably, even though it must be confessed that the daily consumption of food by this method was relatively uniform. We can, therefore, without more evidence, just as easily draw favorable conclusions for benzoic acid from the slight increases in weight which almost all of these well-fed test persons showed as unfavorable ones from the opposite facts in the Wiley experiments. It only shows that benzoic acid is not grossly harmful. Exact metabolism observations in the absolute sense are, also impossible, only relative values can be discussed exactly, and here, too, the so widely varying nutrition is a somewhat disturbing factor.

The utilization of dry substance, fat and albumen, as we are accustomed to observe it in Germany, is not ascertained here. But I have convinced myself, from a series of values which I have calculated, that no influences on the utilization is to be observed. The corpuscular elements in the urine were not, contrary to the observations of Wiley, increased. No general symptoms were noted, either with the smaller or the larger doses. Of the numberless details of the three investigations we can safely say that, like Wiley's, they show that in almost all special cases, nothing essential is changed by the administration of benzoic acid; I may, therefore, confine myself to picking out a few points. Chittenden expresses, at the end, his extraordinarily favorable opinion that sodium benzoate, up to a dose of 4 grams daily, is no more disturbing or harmful to the human organism than the same quantities of salt. He makes no reservation in any direction, draws no suspicious conclusions from his observations, not even from the establishment, by Wiley's results, that the excretion of benzoic acid as hippuric acid in the urine is somewhat retarded. Long obtains very favorable results; he did, indeed, observe in his uneducated test persons (institute help, etc.) a slight disturbance at times (headache, vomiting, disturbance of sight, excitement), but always found a plausible explanation for it and never feels forced to ascribe it to benzoic acid. Herter noticed, especially with large doses, a slight increase of indican in the urine, but no change in the alkylsulphuric acid, a decrease of the fecal bacteria which evolve gases and an increase of the cocci as compared with other bacteria in the feces. All these facts find a natural explanation in a somewhat decreased carbohydrate fermentation in the feces and somewhat increased scission of albumin, owing to certain bacteria or bacterial functions being favored by the benzoic acid at the expense of others no one will interpret this as being hygienically dubious. Herter's values (p. 747) show very prettily the smooth transformation of benzoic acid into hippuric acid; according to his experiments, there is no appreciable retardation. A striking fact in all four of Herter's test persons was the increase of free hydrochloric acid in

the expressed gastric juice during large benzoate doses, which could easily be considered as a symptom of irritation of the stomach but is also capable of other explanations. Gerlach's experiments (see below) showed nothing of this in man or animal. There are many other details in this voluminous book, but they are hardly of significance for the problem and I have tried to bring out anything that might be disadvantageous for benzoic acid.

Most perspicuous to us Germans is the investigation carried out by Dr. Gerlach, of Wiesbaden, by German physiologico-pharmaceutical methods and which, though far behind the American works in scope and extent, can be the more easily surveyed as a whole. Small, medium and large doses were tested on animals and men. I shall not enter into the details of the experiments with rabbits, which were able to take very large doses of benzoic acid without any effects. One gram of benzoic acid was borne subcutaneously by a rabbit for 12 days without harm; a dog was fed with 7.5 grams of sodium benzoate in one dose without disturbing effects; in experiments on the investigator himself, 19 grams of benzoic acid, taken within 3 hours, had no influence on the pulse, respiration, body temperature, digestion and general well-being. (Not every stomach can stand such a dose!—Reviewer.) Two persons daily took 0.5 and 1 gram of benzoic acid and sodium benzoate, respectively, for 80-90 days without any effect. The most careful observation showed no special disturbances of the respiration, pulse or body temperature after taking 1 and 2 grams of benzoic acid and sodium benzoate respectively. The action of the digestive ferments, gastric juice, trypsin and the diastatic ferments was not influenced by benzoic acid and sodium benzoate. Three and five grams of benzoic acid and sodium benzoate had no influence on the quantity, acid content and digestive power of the gastric juice of a dog subjected to the Pawlow operation. Half a gram and 1 gram of benzoic acid and sodium benzoate, respectively, taken by the experimenter at a test breakfast, exerted no influence on the free hydrochloric acid, total acidity and digestive power of the gastric juice, collected one hour after the breakfast. In metabolism experiments on men, it was found that 1 gram benzoic acid or 1.5 grams sodium benzoate (each taken six successive days) had no effect whatever on the stock of albumin in the body nor on the utilization of the nitrogenous substance and fat in the food. Eighty-two doses of 1 gram each of benzoic acid, taken with 86 days, and 88 doses taken within 92 days, showed no unfavorable effects on the general well-being, body weight, etc. At the end of the experiments, it was found that the benzoic acid, whether mixed foods or chiefly vegetables were eaten, was completely transformed into hippuric acid. Gerlach collects from the literature a large number of cases, not all of which are contained in my earlier reviews, and which show that large doses of benzoic acid can be taken by healthy and by sick people without harm, and he concludes with the words: "Neither the observations made in medical practice and reported in the literature nor the large number of experiments which have been carried out for the purpose seem to justify the assertion that benzoic acid and sodium benzoate in small quantities, such as they are eaten in preserved foods, are able to produce any harm whatever. The attempt to prohibit the use of benzoic acid and benzoates as a preservative would therefore not be warranted by the very copious scientific material at hand."

While the American investigators and Gerlach thus reach conclusions which could not be more favorable to those who espouse the cause of benzoic acid, the question as to the admissibility of its use is not yet wholly cleared up in Europe, especially in Germany, and an unfriendly disposition predominates. France summarily prohibited the use of benzoic acid as early as 1888, long, therefore, before its thorough investigation; in Austria, also, it was excluded from use by a decision of the chief of the Board of Health on the 16th of December, 1899, and recently again he has refused his sanction.⁴ The Landesmedizinalkollegium of Saxony has likewise refused to authorize its use.⁵

In Germany the law takes no firm stand against benzoic acid. The acquittal of dealers who introduced margarine preserved with benzoic acid into the trade in Saxony is interesting. The produce dealer Gertrude Eberlein, nee Herber, who had been fined 2 M. for dealing in margarine with 0.05% benzoic acid, had started a long trial in three courts which, however, had ended with her acquittal in the assessor's district, and provincial courts. Injury to health by such doses of benzoic acid no one could maintain; the opponents of benzoic acid among the judges asserted that benzoic

acid is really a preservative, that the addition of benzoic acid makes it possible to store margarine, but that the public demands fresh margarine and that the stored product is not as good as the fresh margarine. The arguments frequently made by the judges in favor of acquittal were the following: Benzoic acid has thus far not been prohibited in Germany; it occurs in cowberries in considerable quantities; in the amounts in question it is harmless; the nutritive value, wholesomeness and usefulness of the margarine is not changed; it is, therefore, a preservative which, where applicable, offers great advantages long sought for, without any disadvantages. The following judicial verdicts concerning benzoic acid in margarine have come to my knowledge: 1. Acquittal of the manufacturer, F. A. Isserstedt, Elberfeld, before the assessor's court of Solingen on November 11, 1908.⁶ 2. Acquittal of the manufacturer Held, Schkeuditz, before the assessor's court of Schkeuditz.⁷ 3. Acquittal of the same before the provincial court of Halle. Appellate proceedings on May 3, 1910.⁸ 4. Acquittal of the merchant, G. Eberlein, before the assessor's court of Dresden in June, 1910.⁹ 5. Acquittal of the same before the district court of Dresden on February 8, 1911.¹⁰ 6. Acquittal of the same before the provincial court of Dresden on June 7, 1911.¹¹

The following express themselves in favor of the use of benzoic acid (for margarine): 1. Professor Eccles in his book, "Die Bedeutung der Konservierungsmittel für die menschliche Ernährung in wirtschaftlicher und hygienischer Hinsicht"; 2. von Vietinghoff-Scheel;¹² 3. Gustav Heffter;¹³ 4. The food chemist, Dr. Langfurth, Altona;¹⁴ 5. The food chemist, Dr. Postler, Mühlhausen;¹⁵ 6. Professor Klostermann, Halle; 7. The food chemist, Dr. Niederhauser, Wiesbaden;¹⁶ 8. The food chemist, Dr. Lührig, Breslau. 8. Professor Frerichs, Bonn.

Recently the Prussian Committee on Medical Affairs has expressed itself, in a decidedly surprising manner, in favor of the prohibition of benzoic acid as a preservative for human foodstuffs and luxuries. The referees, Privy Councillors Heffter and Abel,¹⁶ frankly acknowledge, indeed, the conclusiveness of the proof afforded by the investigations of Chittenden, Long and Herter that small amounts up to 0.5 gram are harmless to the human body, but they continue: "Whether larger amounts (quantities of several grams) could, in the long run be borne equally without effect by everybody cannot as yet be answered with certainty. The experiments of the American scientists in this connection are of too limited extent and suffer from certain limitations so that they cannot be considered as proof of universal harmlessness." With these carefully worded sentences we can, on the whole, agree without, however, drawing the conclusion therefrom that benzoic acid as a preservative is to be prohibited. For, first of all, we must consider that there are many food constituents which, under such a system, we might mistrust and likewise prohibit. I might mention hops in beer, sugar in preserves, and salt in meat. There are, beyond doubt, many of whom it can be said with certainty that not only the repeated consumption of such things, but even a single meal off of them is prejudicial to their health. Those suffering from urethral diseases cannot stand hops, diabetes patients and persons with stomach troubles cannot stand preserves, kidney sufferers cannot stand salt, yet such sufferers are continually eating these things, consciously or unconsciously, without anyone prohibiting them to the world. Secondly, from what has been said above, it is evident that benzoic acid, considering its preservative action on acid substances poor in albumin (for others it does not come into consideration), is remarkably harmless to the healthy and the sick—with no other preservative have such daring experiments been performed on sick persons without harm. If a healthy or a sick person were given just once ten times the amount of tobacco, alcohol or even of sugar as is usually taken rationally, the results would be far worse when, instead of 0.1 to 0.5 gram benzoic acid, 1-5 grams are given. I offered this same argument, with equal justification, many years ago to those who persisted in considering saccharin as a poison.

Thirdly, no one has thus far asked more than that it be

⁴Jahresb. Medizinalw. Königsreichs Sachsen, 1905, 193.

⁵Z. Marg.-Ind., 1908, 69.

⁶Ibid., 1910, 113.

⁷Z. Marg.-Ind., 1910, 113.

⁸Ibid., 1910, 152.

⁹Ibid., 1911, 69.

¹⁰Ibid., 1911, 159.

¹¹Chem. Ztg., 1909, 181, 1910, 104.

¹²Technologie der Fette und Ole, Vol. 2, p. 192.

¹³Z. Marg.-Ind., 1910, 152.

¹⁴Ibid., 1911; cf. also Chem. Ztg., 1911, 28, 53.

¹⁵Das Österr. Sanitätsw. 1910, Nos. 13-15.

considered whether certain special food products might not, under proper declaration, be treated with small quantities of benzoic acid. No one, except perhaps a few manufacturers, has ever dreamed simply of a permission to add benzoic acid to foods. On the contrary, there cannot be much doubt that for meat and meat preparations benzoic acid and benzoates should be prohibited; they have little preservative power, and when mixed with other substances (phosphates) they help to preserve a fresh color, while the decomposition goes on; like the sulphites, therefore, they give a deceptive appearance of better condition, and according to the Heffter-Abel decision even a slight odor of putrefaction of minced meat is masked or removed by the admixture of 0.25% of benzoic acid or benzoates. No one will demand the free use of benzoic acid for tinned vegetable preserves; in these cases nothing but heat is necessary. The question is whether its use for preserving egg yolks, tomatoes, lemon juice and similar preparations, as well as margarine (and this is at present the most important), can be permitted. The first-named preparations, egg yolks, tomatoes, lemon juice, are of subordinate interest as regards public nutrition and can be passed without further discussion; even the most timid would not need to fear gravely for the public health if benzoic acid in such preparations were allowed, a statement as to the amount used being required. Personally, I am unconditionally in its favor when it is proved that these products can be prepared in a non-perishable form and kept without preservatives only with great difficulty, or not at all.

The question as to allowing the use of benzoic acid in margarine, which has become a real public foodstuff, demands special treatment. One hundred and fifty million kilograms of margarine are said to be produced annually in Germany and a considerable part of it used in this country. It would be very difficult today, especially for those living in cities, to protect themselves against margarine in their food. Anyone in a hotel or purchasing fatty confectionary or bakery wares will at once make the acquaintance of margarine; only the preparation of all food in one's own house insures safety. Margarine has won this position in spite of all compulsory declarations, in spite of the foreign sounding name, because it fills the need of the people for a cheap fat. Leaving out one recent case where the criminal negligence of a firm in carelessly selling a poisonous foreign fat caused many cases of illness and some deaths, so far there has not been much with which margarine can be reproached.

Now, a difficulty in selling margarine in the smaller shops with limited trade is the fact that it easily becomes moldy; the addition of 0.1% of benzoic acid does away with this disagreeable property. The opponents of the preservative assert that the margarine protected by benzoic acid spoils without its being easily noticed; the purchasers get an inferior "old preparation." Its friends reply that the addition of benzoic acid facilitates the keeping of the margarine without appreciably impairing it and thus for the first time makes it a non-perishable substance easy to sell everywhere. Heffter reports that, according to experiments of the Royal Bureau of Health, good margarine, containing not too much water, keeps for months under proper condition; it is questionable whether a ware, in the condition designated here as good, could be obtained in sufficient amount to meet the demand, and especially whether our small shopkeepers in city and country can offer the "proper conditions of storage." For myself, I must recommend, in the light of our present knowledge, that a declared addition of 0.1% of benzoic acid be allowed if thereby margarine which thus far it has been possible to keep only under special conditions, becomes a non-perishable ware. The quantity of preservative added is harmless, does not deteriorate the ware, conceals no bad properties and facilitates the handling of an important foodstuff which otherwise spoils quite easily. If this last assumption is not correct, if a margarine preparation can be made which, with some care, will keep sufficiently well even under the difficult conditions of small trade, then there will be no need for exceptional cases. The decision of this question lies with the specialists.

One word, finally, as to the objection we always hear whenever a new chemical preservative comes up: That it favors unclean work. This is doubtless true, but it applies equally well to heat and cold, drying, sugar, creosote, benzoic

acid, etc. Many carefully prepared, easily spoiled wares also spoil in time without the use of one of the above-named preservatives; we, therefore, have to permit their use, even if this permission facilitates the preservation of carelessly prepared wares.

PROF. J. H. BEAL.

Friends of Prof. J. H. Beal of Seio, Ohio, are asking his appointment to succeed Dr. H. W. Wiley as chief of the Bureau of Chemistry in the Department of Agriculture.

Prof. Beal's name has often been associated with this position, but probably more in recognition of the fact that he embodies the characteristics of the peculiar type of man which the office has come to require than with any hope that he could be induced to accept the position.

In addition to having a wide and enviable reputation as a chemist and pharmacist, Prof. Beal is a graduate in law; he has had legislative experience in his own state; he has written



PROF. J. H. BEAL.

food and drug laws now on the statute books of many states; he is endowed with a judicial instinct and an even temperament; he possesses a striking personality and is withal a forceful writer and strong, engaging public speaker. Furthermore, as far as we recall, he has kept entirely free from those controversies which have disturbed and racked the administration of the food and drug law in the past.

Speaking apart from the advocacy of any particular candidate, but wholly from the bearing the appointment will have upon the welfare of the Association of State and National Dairy and Food Commissioners, it is proper to say that the appointment of a man possessing the lifelong experience in educational and research work, wide acquaintance, attainments and general all around qualifications of Prof. Beal would harmonize the conflicting elements of that body, restore its prestige and dignity, and would operate to vitalize the labors of its members, both as administrators of their respective food and drug laws, and as members of the association itself.

¹%. Mar.-Ind., 1910, 124.

"All's Quiet on the Potomac"

By Our Staff Correspondent.

WASHINGTON, April 10, 1912.

For one month, there has been peace in the Department of Agriculture. That is a broad and general way of saying there have been no eruptions in the Bureau of Chemistry. Every day the three members of the Board of Food and Drug Inspection gather around the lunch table, talk about their work and wonder who is to be made chief of the bureau. The average newspaper man does not even know the name of the new member of the board. He heard it when the new man came, but has forgotten it.

All of which is another way of saying that there is not now any member of the board who takes the position that all who disagree with him must, *ipso facto*, be food dopers, poisoners of children and minions of "the interests" against whom, and in defense of weak woman, he must raise his voice, either for a fee paid him as a lecturer or in hope that the raising of the afore-mentioned voice will lead to fees or the Democratic nomination for the vice presidency.

The Voice raised in behalf of weak women and defenseless children has betaken itself from an inhospitable official environment—to cash in on the notoriety gained by devotion to the public weal (by means of newspaper interviews that were usually the veriest flubdub) instead of strict attention to official duties. Had there been such strict attention to the laboratory for the government, which paid for the services not received, Mr. Miller, the assistant to the Attorney General in charge of the prosecution of an important case, might not have found himself up a tree and out on a twig, as he did when he came to the point where it was necessary to put on the stand some expert chemist who could testify as to whether or not caffeine is a harmful substance. Attention to the business for which it was paid would probably have enabled the Voice to take the stand and qualify as some kind of an expert in the matter of analyses of food products.

It is not a matter of absolute knowledge, but it is suspected that the factions in the food trades that had the active support of the man who was supposed to be an umpire to decide disputes as to what is the right thing in the food and drug trades, feel keenly the loss of their champion. It will probably be a long time before the insiders in the Distillers' Securities Corporation will be able to manipulate the stock of that company by reason of any information they may have as to what the Department of Agriculture is about to do with regard to disputes in the whisky trade.

Without doubt it will be a still longer time before a non-user of benzoate of soda will be able to send a wagon-load of its products to the Bureau of Chemistry, have it photographed with the Chief of the Bureau of Chemistry as one of the exhibits, and then have a press agent accused of furnishing "tainted news" to get fine free advertising for the stunt.

The man who is acting Chief of the Bureau of Chemistry knows that any attempt to give such favors to one faction, above all others, would result in a sharp reprimand, if nothing worse. The man who is appointed to take the place of the Voice will also know that any violent bullying of the stock of the trust that controls the so-called straight whisky business, just about the time a decision was to be made, would lead to an investigation.

Aggressively stated, the proposition is simply this: Secretary Wilson, having been kicked around worse than any houn' dawg in Missouri or any other place, knows that he cannot afford to again allow a bureau chief to set himself up as the one having original and conclusive jurisdiction over any question of law and fact, such as the Voice did when the label law was enacted, and then, when his authority to do that was questioned, run to muck-raking newspapers with stories of how he was being "interfered with" in his enforcement of the law, in the interest of food dopsters.

No one has ever been taught a more bitter lesson than James Wilson, Secretary of the Department of Agriculture. He allowed the Bureau of Chemistry to make the most preposterous contentions in its own behalf and now has mangy skunks making the air nauseous with platitudinous declarations that "the secretary is responsible for this."

Of course the secretary is responsible for everything done

either by himself or Solicitor McCabe for curbing Wiley's ambition to make the Bureau of Chemistry an agency whereby one food faction should destroy its competitors, under the holier-than-thou pretense that it was giving the public cleaner or purer food products than somebody else.

Had there been no curb placed on the Voice, the factions whose cause was espoused by the Voice would now be in undisputed possession of the fields in which they operate. The courts might have wiped the food and drugs act off the books as unconstitutional because of the fantastic constructions placed on it by the Voice, but the damage would have been done to the manufacturers not members of the factions the Voice approved.

The courts cannot protect a man's reputation when it is attacked under pretense of prosecution for violation of a statute made for the purpose of preserving health. Take for instance that man Harper, of this city, who used acetanilid in headache medicine. He was prosecuted under the construction of the statute made by Solicitor McCabe. The Voice, of course, never "went after" the men who claimed to be able to cure the diseases that are now held to be generally incurable until he had been driven to do it by the sarcastic letters of McCabe, but that is neither here nor there except as a sidelight on the case of the man under consideration.

Harper was found guilty and fined \$600 or something like that. Roosevelt, in a public statement, scored the judge because Harper was not given a jail sentence.

Almost as soon as Harper was convicted the men in the bank of which he was president told him he would have to get out. He undertook to fight, but they turned him out. He was given the cold shoulder in other ways in the business world. His reputation was seriously damaged.

Yet the construction put on the statute by McCabe was thrown out when the Supreme Court passed on the Johnson case. But does that do Harper any good? Does it give him back the presidency of the American National Bank? Not so that anybody notices it.

Does the virtuous Moss, who is so wise, so good, so honest, so powerful in his defense of the Voice, do anything to see to it that the law held to be insufficient to catch the men who claim to cure incurable diseases is made sufficient? Not at all. It is months since President Taft took the advice of Secretary Wilson and sent a special message to Congress advising that body to amend the law so that the statute will get at such men. Oh, no, there is nobody to fight for the poor devils who are misled into buying colored water and a few harmless drugs, thinking the concoction will cure consumption, but Moss and other backers of the Voice wish there were twenty-six or more hours in each day to be spent in endeavoring to blacken McCabe, who tore the skin off the official back of the Voice because it would not undertake to prosecute the sellers of worthless nostrums, and make the American people believe that Secretary Wilson is the most devilish villain that has ever been in public life.

The publications which started the fight against that kind of nostrums are too busy praising the Voice and trying to besmirch Wilson to take note of the fact that Moss and the other backers of the Voice have not done a thing to change the situation produced by the Supreme's Court's decision in the Johnson case.

To all intents and purposes this session of Congress is now closed so far as legislation of that kind is concerned. In a short time the leaders of both House and Senate will be working day and night to get the appropriation bills out of the way. There will be no time then for legislation of the kind needed to change the scandalous condition of the law with regard to the makers of medicines for the curing of incurable diseases.

This state of affairs naturally raises the query as to whether Moss and other backers of the Voice are not afraid to undertake anything to make the law strong enough to make them moderate their misleading labels. Any serious attempt to amend the law would certainly create the possibility of somebody reviewing the whole matter. Such a review would bring before the country the following facts:

That the Bureau of Chemistry made no attempt to curb

the makers of such nostrums until after McCabe had ex-coriated the head of that bureau.

That it is four months since President Taft pointed out the defect in the statute laid bare by the decision of the Supreme Court by sending a special message to Congress.

That during those four months the fights started by the head of the Bureau of Chemistry in behalf of the so-called straight whiskey faction and the non-users of benzoate of soda, have been kept alive by the Moss committee.

That instead of undertaking to cure the defect in that law, the Moss committee started an investigation of the made-to-order Everglade scandal, in which the only real rottenness brought to light is shown in the letter in which Frank Clark, the Florida congressman who made the "charges," showed that he tried to induce the so-called land sharks to speculate in the land he had to sell instead of the Everglade land, and the making of false vouchers by some of the people in the Drainage Bureau of the Department of Agriculture.

That now, in a further effort to lead the public to think that Secretary Wilson is not straight, the Moss committee has been debating the advisability of starting an investigation of the meat inspection service, about which the public has never had a suspicion of any kind, because Dr. A. D. Melvin, the head of that bureau, is so strict in his notions of what is decent conduct for a public servant that he refuses to write magazine articles because he says all his time and energy belong to the government that pays him his salary.

And finally, that Moss has refused, time and again, to receive the permanent abeyance register, about which there has been so much chatter in *Collier's*, because he knows it makes the blood of the Voice run cold every time there is a proposition to have that register printed, and because such publication would have a tendency to show that the man who proposed the prosecutions the board decided not to make was either a fool or—oh, well, what is the use of trying to characterize a being created in the likeness of a man, who has built up a reputation on platitudes about being the only one who has made it possible for weak women and defenseless children to survive?

INDIANA LETTER.

(From a Staff Correspondent.)

INDIANAPOLIS, IND., April 10, 1912.

The finding of the special master in chancery in the celebrated Indiana benzoate of soda case, brought by the Williams Brothers Company and the Curtice Brothers Company against the Indiana State Board of Health to prevent the board's enjoining the sale of goods containing benzoate of soda has had little or no effect on the food condition in the state. The board had been enforcing its rule for several months before the case was taken to trial, and continued its enforcement during the more than a year the case was in controversy. As a result, benzoated goods had virtually disappeared from the Indiana market, and only showed up where it arrived in original packages to the restaurant keeper.

The Federal judge, to whom the finding of the special master must go, has not yet passed on the finding, but food authorities here believe the court will not change the finding materially.

In effect the finding holds the State Board of Health has power to enact rules, and the general assembly to enact laws, to regulate the manufacture of foodstuffs and their sale within the state. In making his finding, the special master dwelt at some length on the theory of the board that by the use of benzoate certain classes of food manufacturers might use inferior stuffs, thus producing an inferior grade of goods that the consumer could not tell from first class stuff because of the presence of the preservative. It was on this point, rather than on the physiological effect of the preservative, that the state board made its fight. Dr. J. N. Hurty, Secretary of the State Board of Health and State Food and Drug Commissioner, never backed up very strongly the contentions of Dr. Wiley that the preservative was harmful from a physiological viewpoint.

The attempt of the Indianapolis consumers to obtain, by city ordinance, a method of getting closer to the food producer, has failed through the refusal of the City Council to enact a market ordinance which was under consideration for several months. This ordinance planned to provide a special market master with power to purchase and sell stuff at a ten per cent margin, as a means of breaking up any combination that might be formed on the part of commission men and stall keepers to boost the price of any commodity.

Indiana canners, who met here recently to prepare for the approaching canning season, voted to get in line with the Indiana food laws without further fighting. There was a

little protest when a resolution to that effect was introduced, but the protest was soon quieted. Inspection of the canning plants for the approaching season will soon be begun by the state board. Last year the plants graded high both in preparation for the season and when the season was at its height. The canners fear a light crop because of the lateness of the season and inability to interest the farmers in putting out a crop.

The State Sealer of Weights and Measures has been busy trying to whip into line the recalcitrant berry box manufacturers and users who have shown signs of disregarding the new law which provides the commissioner with power to see that berry boxes are of standard size. When the law was enacted in 1911 it was made so as to permit the use of small size boxes last year, and this year growers sought to carry the privilege over. Thousands of undersize boxes were purchased, but at the instructions of the state sealer were returned to the manufacturer. Subordinate sealers, as well as inspectors for the State Food Department, are under instructions to seize undersize boxes and to prosecute the dealer who offers goods in them for sale.

MUCH BAD FOOD DESTROYED.

The Food and Dairy Department of the state of Washington has been unusually active the month just passed. At Seattle the department has seized and destroyed about a ton of frozen halibut. The Commissioner now has under seizure at that point twenty-five barrels of cold storage poultry, mostly turkeys, owned by a Chicago party. Application has been made to the Superior Court for an order to destroy this as being in a condition not fit for human consumption. The amount of this is about four tons. At Tacoma the inspectors have just found and destroyed 600 pounds of halibut in one place and about 3,000 pounds in another place and have also destroyed 500 pounds of corned beef. Several hundred pounds of fish and poultry were also destroyed at Spokane.

In the drug work several hundred ounces of fluid extracts and other drugs have been removed from the shelves and destroyed. No arrests were made during February and March under the food and drug work other than the general condemnation of bad stocks mentioned. In the food work, however, several slaughter houses were closed as insanitary until such time as improvements required by the department were made.

In the dairy work twenty meetings were held in the farming communities under auspices of the several granges giving illustrated talks on dairying and agricultural seed topics. This extension work has proved very profitable to the dairy industry and is carried on in addition to the regular inspection and instruction work as carried on in the field. In the twenty meetings about one thousand dairymen have been met. In Tacoma samples of the city milk supply have been taken four times within a few weeks and four to six arrests made after each testing. The last was made March 16, one man having been arrested four times within the time stated and getting a fine of \$200, with a threat of full jail sentence if caught again.

OHIO COMMISSIONER WARNS CREAM BUYERS.

Under date of March 1 Commissioner Strode of Ohio has addressed the following letter to buyers of milk and cream in that state:

"The attention of all buyers and sellers of milk and cream, who are using the Babcock test to determine the value of butter fats of such product so bought or sold, is hereby called to Section 12724 of the General Code:

"Whoever, at a cheese factory, creamery, condensed milk factory or other place where milk is tested for quality or value, manipulates, underreads or overreads the Babcock test or any other contrivance used for determining the quality or value of milk or cream, or makes a false determination by the Babcock test or otherwise, shall be fined not less than twenty-five dollars nor more than one hundred dollars."

"This warning is issued in view of complaints of over-reading and underreading.

"Violations of this section have been discovered and prosecutions are being entered against the offenders.

"Samples of cream taken by this department from the cream before its delivery have shown too much variation in the percentage of butter fat found therein, and from that allowed for the same portion in the report by the creamery.

"Sampling and testing should be done only by responsible persons who are known to be not only honest but accurate at all times."

The Law and the Food Manufacturer

FINDINGS OF THE REFEREE IN THE INDIANA BENZOATE OF SODA CASE.

The long drawn out case of the Williams Brothers Company and the Curtice Brothers Company against Harry E. Barnard, State Food and Drug Commissioner of Indiana, and the members of the Indiana State Board of Health, in the United States District Court for the district of Indiana, in which an injunction was sought restraining the defendants from enforcing a ruling of the board against the sale of foods containing benzoate of soda as a preservative, has been brought to a head with the filing of the report by the master in chancery to whom the hearing of the case was submitted. The master's findings of fact and of law are in the following language:

FINDINGS OF FACT.

1. The complainant, Williams Brothers Company, is a corporation organized and existing under and by virtue of the laws of the state of Michigan, having its principal office and place of business in the city of Detroit, in the state of Michigan; and the complainant, Curtice Brothers Company, is a corporation organized and existing under and by virtue of the laws of the state of New York, having its principal office and place of business in the city of Rochester, in the state of New York. The defendants are all citizens of the state of Indiana and residents of said state of Indiana.

2. The said complainants were respectively, at the time of the filing of the bill of complaint herein, had been for more than twenty (20) years prior thereto, and still are, engaged in the business of preserving, canning and manufacturing tomato and pickle products for the market; said Williams Brothers Company has approximately nine hundred thousand (\$900,000) dollars in money actually invested and employed in its said business; said Curtice Brothers Company has more than one million five hundred thousand (\$1,500,000) dollars actually invested in its business. For several years prior to the filing of the bill herein, and especially in the year next preceding such filing, the Williams Brothers Company sold forty thousand (\$40,000) dollars' worth of its products containing benzoate of soda in Indiana annually, upon which its profits were ten thousand (\$10,000) dollars; for several years prior to the filing of the bill herein, and especially in the year next preceding such filing, the Curtice Brothers Company sold approximately twenty-five thousand (\$25,000) dollars or thirty thousand (\$30,000) dollars' worth of goods in Indiana annually, of which about one-third contained benzoate of soda, upon which benzoated goods its profits were twelve hundred (\$1,200) dollars.

3. The defendant, Harry E. Barnard, is chemist to the State Board of Health for the state of Indiana, and by virtue of being chemist to such State Board of Health, he is State Food and Drug Commissioner; the other defendants are all members of the State Board of Health of the state of Indiana.

4. The amount in controversy in this suit is in excess of two thousand (\$2,000) dollars, exclusive of interest and costs.

5. Up to about twenty-five years ago, jams, catsups and pickles were manufactured according to household recipes and the finished products contained fruit juices, tomatoes and immature cucumbers, together with salt, sugar, vinegar and spices, as the case might be, for condimental and preserving purposes. About that time commercial manufacturers began to use benzoate of soda as a preservative in such products. The benzoic radical is found in cranberries, and possibly some other fruits.

For experimental purposes, benzoate of soda for many years prior to the discovery of toluene, a coal tar product, had been derived from animal urine, but the commercial benzoate of soda is derived from toluene by a process which has been available for some ten years. Even if it were desired so to use it, the benzoate of soda from urine is too expensive in its production to permit of its use for commercial purposes, and the only benzoate of soda used for commercial purposes is derived from toluene, as above stated.

Benzoate of soda is colorless, tasteless and odorless when used in limited quantities as a preservative in foods, but it is not a food in itself, and furnishes neither heat nor energy in passing through the alimentary tract. It is frequently administered as a drug and prescribed as a medicine. It is an antiseptic and a mild preservative, and practically speaking is used as a preservative only in condimental foods; but it is not used in canned or sealed foods which are to be eaten immediately

upon the opening of the vessel, jar or can containing the same.

6. As early as 1901, a dispute existed among physicians, physiological chemists and other scientific men as to the harmful or harmless character of benzoate of soda and benzoic acid when used as a preservative in food products in quantities of one-tenth of 1 per cent or more. Prior to the enactment of the National Pure Food Law, in June, 1906, the Congressional Committee on Interstate and Foreign Commerce held hearings at which a number of witnesses testified as to the effect of benzoate of soda when ingested in food products, and there was at that time a difference of opinion as to the harmlessness or harmfulness of such benzoate of soda and benzoic acid when so taken into the human system as a preservative in food in the quantities above named. Continuously since 1901 there has been a diversity of opinion among physicians and other scientists upon this question, and this diversity of opinion still exists, as is evidenced by the conclusions reached upon the metabolic experiments respectively conducted under the direction of Dr. Harvey W. Wiley, then chief of the Bureau of Chemistry of the United States Department of Agriculture, and the members of the so-called "Referee Board" as hereinafter stated.

Dr. Harvey W. Wiley, late chief of the Bureau of Chemistry of the Department of Agriculture of the United States, superintended an investigation of the metabolic effect of benzoate of soda ingested with food, which was taken under a regimen by a number of normally healthy men ranging from 21 to 50 years of age, and judiciously selected for the purpose of such experiment. Predicating his opinion upon the records of such experiments upon each of such persons, Dr. Wiley announced his belief that benzoate of soda ingested with food, in any quantity, was harmful to the human system.

The above mentioned Referee Board consisted of five members appointed in 1908 under the direction of President Roosevelt, and commenced its work after Dr. Wiley's experiments had been ended, and the work was conducted independently of Dr. Wiley and his bureau. Three sets of experiments were conducted respectively at New York, New Haven and Chicago, and upon the data collected from such experiments prominent physiological chemists and other scientists of the United States have predicated the opinion that benzoate of soda, in quantity of one-tenth of 1 per cent, may be ingested in food without harmful results.

7. By formal stipulation of the parties to this suit, the following facts for the purposes of this suit are to be taken as true, namely:

On the 7th day of July, 1905, the State Board of Health of the State of Indiana passed a rule prohibiting the use in food products of benzoate of soda and benzoic acid, and declaring that products containing such substances were adulterated. On the 15th day of March, 1907, said State Board of Health passed a rule declaring that the presence of any added antiseptic or preservative substances, except common table salt, saltpeter, cane sugar, vinegar, spices, or in smoked foods, the natural products of the smoking process, constituted an adulteration, but permitting until further notice the use of one-tenth of 1 per cent of sodium benzoate for the preservation of tomato catsup, provided a statement to that effect was printed plainly upon the principal label. On October 8, 1908, said State Board of Health passed a rule permitting the use of sodium benzoate for the packing season of 1908 for preserving tomato catsup. Said rules are the sole and only rules adopted by the said State Board of Health in respect to the use of sodium benzoate. There is no rule of the State Board of Health now in force which permits the use of sodium benzoate or benzoic acid in food products subsequent to the packing season of 1908, and the use of benzoate of soda in said State is prohibited, not by rule of said State Board of Health, but by Section 2 of an act of the General Assembly of the State of Indiana, being Section 7639, Burns' Revised Statutes of Indiana, 1908.

8. By formal stipulation of the parties to this suit, the following facts for the purposes of this suit are to be taken as true, namely:

The defendants with the exception of Harry E. Barnard, aside from the part they took as members of the State Board of Health in adopting said rules, have never at any time had anything to do with prohibiting the use of benzoate of soda in food products sold by complainants within the State of In-

diana, except as such rules had such effect. The defendant, Barnard, as State Food and Drug Commissioner, has continuously, since March, 1907, had full charge and control of enforcing the rules of said State Board of Health in reference to the use of preservatives in food products in said State, including benzoate of soda, and in the issuing of orders, directions and bulletins in connection therewith. The defendants, with the exception of Harry E. Barnard, have never at any time in any way intimidated or coerced the public generally or the purchasers of complainants' goods from buying or selling complainants' goods, except as the rules adopted by them had such effect, together with an expectation that they would be promulgated and the public notified that a violation thereof would be a misdemeanor. The defendants, with the exception of said Barnard, have never entered into any conspiracy to ruin any part or portion of complainants' business by bringing to bear upon any of complainants' customers in said State intimidating or coercive means, except as permitting said rules to be promulgated, may have had such effect. None of the said defendants has ever instituted or commenced any criminal prosecution or civil suit against the complainants within the State of Indiana, or elsewhere, of any kind, and neither of the complainants has ever been prosecuted for the use of benzoate of soda or for any other alleged violation of the Indiana Pure Food Law, being sections 7638 to 7649 inclusive of Burns' Revised Statutes of Indiana, 1908.

9. In a number of instances by letters, correspondence and in verbal interviews, the defendant, Barnard, as State Food and Drug Commissioner and chemist to the State Board of Health, has advised dealers, firms, persons and corporations that the use of benzoate of soda as a preservative in food products would be permitted only in tomato catsup and that only for the summer of 1908, and that the use of benzoate of soda in any other article of food was prohibited under the laws of the State of Indiana; and said Barnard, during the time mentioned, instructed inspectors of the food and drug department of the State Board of Health to so advise dealers, firms and corporations throughout the State of Indiana. The said defendant, Barnard, has advised personally and through his inspectors many persons throughout the State of Indiana that the handling of food products in which there was any benzoate of soda, except tomato catsup, was prohibited by laws and rules of the State Board of Health for the year 1908, and that during the year 1907 the use of benzoate of soda was prohibited in all food products except tomato catsups and sweet pickles in bulk.

10. The said defendant, Barnard, in so advising said persons and dealers, acted in good faith in the bona fide belief that in so doing he was taking steps in the line of his duty in accordance with law, and his course of conduct was without any ill will or malice to said complainants, or either of them, and without any intention on his part to injure or harm said complainants or their business within the State of Indiana, but with the bona fide belief that he was enforcing a valid and constitutional enactment of the General Assembly of the State of Indiana, and said defendant, Barnard, never at any time entered into any conspiracy of any kind with any person or persons to intimidate complainants or their customers, or to ruin any part of their business.

11. Properly manufactured tomato catsup is made of the boiled pulp of whole, ripe, sound tomatoes, with added salt, sugar, vinegar and spices which have the effect of preservatives, or condimentals, or both. Prior to the last thirty years these condimentals and preservatives were the only kind of preservatives that were used for preserving the fruit juices, tomato catsups and pickles from fermenting or spoiling. Within the last thirty years the use of benzoate of soda as such preservative in the tomato catsup of commerce began and thenceforward has continued to this date in different parts of the United States, and for the last twenty years or more each of the complainants has used benzoate of soda or benzoic acid in the manufacture of tomato catsup and a few other products which they respectively have commercially prepared and put upon the market.

12. While there is a diversity of opinion among scientific men qualified to speak upon the subject, as to the harmfulness or harmlessness of benzoate of soda, when used in limited amount as a food preservative and ingested by healthy persons ranging in age from 20 to 50 years, and this diversity of opinion varies between an absolute affirmative and an absolute negative, and is impossible of reconciliation under the testimony taken in this case, still it is true that the testimony taken in this case does not establish as a fact that benzoate of soda when used as a food preservative and ingested by children, aged persons, invalids, convalescents or persons suffering from chronic disease is harmless even when the quantity of benzoate of soda so ingested does not exceed one-tenth

of 1 per cent. It cannot be said under the testimony in this case that it is yet established as a scientific fact that benzoate of soda used as a preservative in food products in amounts not exceeding one-tenth of 1 per cent when ingested by persons in middle life and in normal health is harmless with respect to the health of such persons.

13. The use of benzoic acid and sodium benzoate in food products does not disguise or cover up the color, odor or taste of decomposed, putrid or rotten tomatoes or other food products, but benzoate of soda and benzoic acid are both preservatives and as used by the complainants and other food manufacturers do delay or retard the growth of yeast, molds and bacteria. The complainants' products are made of the best selected raw material, and they do not contain putrid, rotten or decomposed material. It is possible to prepare a tomato catsup from skins, cores, refuse, factory waste, and partially or wholly of rotten, putrid and decomposed tomatoes, and with the addition of sodium benzoate to keep this catsup after the same has been opened until it is consumed, and by the addition of spices, sugar and vinegar the taste of this product will be so covered up and concealed that it will be fairly palatable. It is also possible to prepare a tomato catsup made from decomposed and rotten material without the use of benzoate of soda, but with salt, vinegar, sugar and spices so that the same may be consumed after the package is opened, and it will be a fairly palatable catsup. Benzoate of soda is frequently used by manufacturers other than the complainants in the preparation of catsup made from rotten, decomposed and putrid tomatoes.

14. The body of the tomato is composed of what are called pectins. These pectins are present in large quantities in the pulp of the tomato, and in small quantities in the skins, cores and peelings. In order to prepare a catsup commercially without the use of benzoate of soda, there must be a heavier body to the catsup, and in order to obtain this body the skins and refuse, if used, must be run through a sieve; and this process makes it impracticable from a financial standpoint to prepare, without the use of benzoate of soda, such a catsup from putrid, rotten and decomposed tomatoes, or from factory waste, skins, cores and peelings. Where factory waste, refuse, cores, skins and peelings of rotten and decomposed tomatoes are used in the preparation of tomato catsup, not being run through a sieve, they produce a thin, watery catsup, and such catsup cannot be prepared so that it will keep after opening without the use of benzoate of soda, benzoic acid or similar preservative. The use of benzoate of soda in such catsup delays and retards fermentation, and such non-fermenting products are calculated to deceive the public as to the actual ingredients of which the product is made, and to cause the public to believe that the product is made of pulp of fruit instead of cores, skins and peelings.

15. There is no scientific or financial reason for the use of benzoate of soda or benzoic acid in pickles, jams, jellies or fruit butters, and each and all of said products can be prepared without the use of benzoate of soda or benzoic acid and kept after opening until consumed without spoilage or loss from fermentation. Said pickles, jams, jellies and fruit butters can be so prepared and kept after opening until consumed without the addition of any other ingredient and without the change in quality of the ingredients that are used in said products when benzoate of soda is also used and without the addition of anything that is not essential to the manufacture of said products.

16. In the sense and to the degree stated in the foregoing findings, benzoate of soda when used in food products of inferior quality is approximately efficient in concealing the inferiority of such food products.

17. Neither of the complainants has ever sold, shipped or used in any way skins, cores or peelings, or inferior or rotten fruit, and in so far as either of the complainants has used sodium benzoate, it has not at any time so used sodium benzoate directly or indirectly for the purpose of preserving or concealing fruit products containing skins, cores or peelings, or inferior or rotten fruit.

18. The natural fruit flavor of the catsups of each of the complainants makes these goods popular with the purchasing public, and this popularity is a valuable financial element in the good will of each of the complainants in its manufactured catsups. Each of the complainants states the fact to be that this natural fruit flavor cannot be obtained by it in its manufactured catsups without the use of sodium benzoate or some other tasteless preservative. Competitors of the complainants claim that they can and do obtain and keep the natural fruit flavor of their manufactured catsups without the use of benzoate of soda or other tasteless preservative. The testimony does not show, as a scientific fact, the basis of the claim of the complainants that they cannot obtain and keep the natural

fruit flavor of manufactured catsups without the use of benzoate of soda or some other tasteless preservative. The testimony does show that manufacturers of catsups who ceased the use of sodium benzoate after they had so ceased increased the sugar and vinegar content of their catsup.

19. Each of the complainants in its manufacture of catsup used vinegar which, expressed as acetic acid, ran from sixteen-hundredths of 1 per cent to three-tenths of 1 per cent. This quantity of vinegar, without an added preservative, would make a total average acidity of about eighty-five-hundredths of 1 per cent of their catsup, and this average acidity is insufficient to keep such catsup from spoiling after it has been opened and exposed to the air without such additional preservative.

20. Until a recent date the method of ascertaining the sodium benzoate contained in food products was not approximately exact, and the delicacy of the process made it very difficult practically to ascertain the sodium benzoate content with reasonable accuracy. Each of the complainants labeled its catsups as containing one-tenth of 1 per cent of sodium benzoate, and each of the complainants in so labeling its catsups acted in good faith, believing that such statement was truthful.

Upon the foregoing findings of fact, said master makes and states the following:

CONCLUSIONS OF LAW.

1. Inasmuch as it is stated in the above findings of fact, in effect, that it is a fact that benzoate of soda when used in foods, in limited quantity, is so used as a preservative substance, and that it is not an accepted fact that in the scientific world that benzoate of soda, even in limited quantities and when ingested in the foods of human beings, is harmless, the State of Indiana has the power to enact a law forbidding the use in any quantity of benzoate of soda in food products, even though the State of Indiana in such legislation by express language permits the use in food products of other harmless added ingredients.

2. The act of the General Assembly of the State of Indiana approved March 4, 1907, being Chapter 104 of the Acts of 1907, entitled "An act forbidding the manufacture, sale or offering for sale of any adulterated or misbranded foods or drugs, defining foods and drugs, stating wherein adulteration and misbranding of foods and drugs consist, and defining the duties of the State Board of Health in relation to food and drugs, their inspection, purity and misbranding, regulating the slaughter of animals and their preparation for food, providing an appropriation for enforcement, providing for the appointment of a state food and drug commissioner, declaring penalties for the violation of the laws, rules and ordinances concerning food and drugs, repealing acts in conflict therewith, and declaring an emergency."

(a) is not, nor is either of its sections, violative of any provision of the constitution of the State of Indiana;

(b) the said act is not, nor is either of its sections, violative of any provision of the constitution of the United States or its amendments;

(c) but the said act is, in all of its parts, constitutional under both the state and national constitutions.

3. The equities of the case are not with the complainants, or either of them, and the bill should be dismissed at complainants' costs.

THE LABELING OF PREPARED MUSTARD.

The decision of Judge Holt of the United States District Court for the Southern District of New York in the mustard case of the United States vs. Allart & McGuire, April 3, is regarded in the grocery trade as something more than an ordinary victory. According to the opinion of Judge Holt, expressed in his refusal to submit the question to the jury, the whole question of hinging a charge of adulteration on the fact that prepared mustard contained other ingredients than clear mustard is straining the intent of the pure food law. The court in no uncertain tone gave the government prosecutors a decided setback in the drawing of fine and technical lines in wholesome food products.

The action was nominally in the name of the trustees of the estate of James F. McGuire, but the real defendant was the corporation formed under the name of Allart & McGuire since the action was brought. William Beverly Winslow was counsel for the defendant, and Judge Holt in rendering his decision said in part the following:

"The first information charges that the article was misbranded in that said label would indicate that the article was prepared mustard, whereas in truth and in fact said article was not prepared mustard, but was a mixture of brown mustard, vinegar, spices, charlock and turmeric, which said char-

lock and turmeric were not normal ingredients of prepared mustard. That is the charge. There is no complaint that it contained brown mustard, vinegar and spices, but that charlock and turmeric were contained in it and it is alleged that they were not normal ingredients of prepared mustard.

"I think the evidence shows that they are, that they have been used for years for the purpose, that there is nothing harmful about either of them, and that charlock is a kind of mustard. The evidence shows that it gets into all mustard of the other kind because they are grown together.

"The evidence shows that they used to make mustard of wild mustard entirely, and that it is still used for a cheaper form of mustard. It seems to me that there is no ground to send this case to the jury on the ground that the prepared mustard contained 10 per cent of wild mustard, which is the same thing in a milder form, or on the ground that it contained turmeric, which is a vegetable substance of the nature of a spice, at all events a condiment, used daily in the East as an article of food in connection with curry. It seems to me there is no ground for holding that they are not normal ingredients of prepared mustard. Prepared mustard contains all these different ingredients, these spices, salt, and so on, and it is supposed to make a better brand of mustard; that is, people prefer it to simple dry mustard. If it contains nothing unwholesome and improper, I do not see that the food act prohibits it.

"The other information charges that the prepared mustard was misbranded because it contains turmeric, the said turmeric being an artificial coloring matter, and not one of the normal ingredients of the prepared mustard. Now it is not an artificial coloring matter in any ordinary sense; it is a natural coloring matter. It may be said that it gives an artificial color to the mustard, because it produces a color different from the color of mustard, but it is not artificial. It is a kind of condiment which produces a slight change in the color. The government says it is not one of the normal ingredients of prepared mustard. I think the evidence shows that it has been for a great many years. It may be that people prefer it. They prefer curry, which is eaten to a large extent all over the world, and turmeric is the principal ingredient of curry. It may very well be that the addition of the different condiments and spices gives a flavor to the preparation which is preferred to plain simple mustard.

"Then the other information charges that the mustard sold was adulterated because charlock and turmeric have been mixed and packed with the article so as to reduce and lower it so as to injuriously affect its quality and strength.

"I have felt some doubt whether I should not send that question to the jury. I suppose that the addition of this wild mustard has some slight tendency to reduce the quality and strength of the original mustard, but the point to my mind is whether there may not be articles so pungent, so strong, that it is desirable to reduce their strength. I think that is what took place with the preparation of some of these mustards. There was found to be a large demand for these milder forms."

At this point the assistant United States attorney interrupted. "We claim it should have been declared on the label," he said.

"I do not know about that," replied the court. "Suppose it is the article which the public wants. If it is the honest purpose to reduce the strength it is a perfectly legitimate thing in the manufacture of food products to do. There is nothing in the evidence in this case that tends to show that this wild mustard was put in for the purpose of cheapening the product, and making money, and selling the mustard as genuine mustard."

"I think upon the whole case that the government has not made out a case at all on any of the counts. I direct a verdict for the defendant of 'not guilty.'"

MINNESOTA ANTI-TRUST LAW UPHOLD.

In a decision which directs a hard blow at centralizing creamery plants, the Minnesota Supreme Court upheld the constitutionality of the law passed in 1909 prohibiting persons, firms or corporations from paying more for milk, cream and butter fat in one locality than another, where the purchase is made for manufacturing purposes. The effect of the decision will be to prevent capital from driving out competition and ruining the small creameries.

The law attacked by the centralizers says, in part:

"Any person, firm, co-partnership or corporation engaged in the business of buying milk, cream or butter fat for purposes of manufacture, who shall with the intention of creating a monopoly or destroying the business of a competitor, discriminate between different sections, localities or communities

or cities of this state by purchasing such commodity at a higher price or rate in one locality than another, after making due allowance for the difference in actual cost of transportation * * * shall be deemed guilty of unfair competition. * * *

A jail sentence or maximum fine of \$500 may be imposed on conviction.

According to testimony given the court, the Bridgman & Russell Company of Duluth went into Pine county, where buyers for small creameries were operating, and paid higher than market prices for milk, cream and butter fat. In this way it drove out competition. The inference made by attorneys who argued the case was that, after disposing of the competition, the company designed dropping the price.

The decision upholds the right of the legislature to enact laws covering trade on special commodities used by the general public, without danger of having these laws designated special legislation or class legislation by the higher courts. The Bridgman & Russell Company made this plea in the case just decided. Its attorneys argued that a law could not be constitutional if it covered merely the sale of milk and not the sale of other articles, because it was special legislation against the milk business. In the lower court the company filed a demurrer, and the case was taken direct to the Supreme Court.

The decision overrules the demurrer and reverses it. The prosecution of the case will now go forward in the Pine county district court. The syllabus follows:

OPINION DELIVERED BY CHIEF JUSTICE START.

1. Classification for purposes of legislation is a matter of legislative policy and discretion, and it is only when a classification is manifestly arbitrary that the courts will declare a statute unconstitutional.

2. Chapter 468, laws 1909, an act to prevent unlawful discrimination in the sale of milk, cream and butter fat, does not violate the equality provision of either the state or federal constitution, or the prohibitions of the state constitution as to special legislation. The classification of the act is not an arbitrary one and the act is constitutional.

3. It is sufficient if the title of a statute is fairly suggestive of its subject, and every fair doubt should be resolved in favor of its sufficiency. The title of the statute referred to is sufficient.

NEW YORK'S NEW NET WEIGHT LAW.

The new weights and measures law of New York, known as the Brooks bill, one of the first of the recent session's legislative crop that has been signed by Governor Dix, is a remarkably widespread measure, affecting almost every commodity that can be classed under package goods, or contained in cardboard boxes, tins, glass and other ware receptacles. Its scope is so comprehensive that it will cover ink, mucilage and suspenders. The act, which was introduced into the Assembly by Assemblyman Franklin Brooks, was passed through the Committee on Agriculture.

According to its preamble it is "an act to amend the general business law, in relation to weights, measures and containers, and to repeal section 263 of the agricultural law."

The act prescribes that all commodities shall be sold by standard weight, standard measure or numerical count. The weight, measure or count shall be marked on a label or tag attached to the commodity sold. Fines of from \$25 to \$500 are provided for violation of the provisions of the law.

The act does not take effect until June 1, 1913, in order to allow all manufacturers and dealers to prepare standard size containers for their products.

All meat, meat products and butter is subject to the law, and must be sold or offered for sale by weight. All beer in bottles is subject to the law, but the law does not apply to products sold for consumption on the premises of the dealer, so that it does not apply to the sale of drinks in restaurants or saloons.

When commodities are sold in containers of other sizes than those specified as standard, as frequently happens with imported goods, the net quantity of the contents of each container, or a statement that the specified weight includes the container, the weight of which shall also be given, shall be plainly and conspicuously marked on the outside or top of the package or on a label or tag attached. Slight variations will not be taken into account in cases of this kind.

The sweeping nature of the bill is modified by the clause that "the State Superintendent of Weights and Measures, with the co-operation of the weights and measures officials of cities of the first class, shall establish uniform tolerances or amounts of reasonable variation." This meets objections that have been raised against the unreasonable administration of pure food laws, and in the wholesale grocery trade the bill is

accepted as likely to check much fraudulent packing. At the same time as wholesalers do interstate business it is still felt that such legislation should be federal in its character, as state laws are found so often to be conflicting and burdensome. Time also is allowed for using up containers that do not come under the definitions of standard measures of the new law.

The full text of the law is as follows, the words in brackets being the old law omitted:

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Chapter twenty-five of the laws of nineteen hundred and nine, entitled "An act relating to general business, constituting chapter twenty of the consolidated laws," is hereby amended by adding thereto, at the end of article two, eight new sections, to be sections sixteen, sixteen-a, seventeen, seventeen-a, seventeen-b, seventeen-c, eighteen and eighteen-a, to read, respectively, as follows:

Section 16. Method of sale of certain commodities. All [ice,] meat, meat products and butter shall be sold or offered for sale by weight. All other commodities not in containers shall be sold or offered for sale by standard weight, standard measure or numerical count, and such weight, measure or count shall be marked on a label or tag attached thereto; provided, however, that vegetables may be sold by the head or bunch.

Section 16-a. Certain sizes of containers when used for vegetables, produce and fruit prescribed. No person shall manufacture, sell, offer or expose for sale containers for vegetables, produce or fruit that are not of the capacity of one barrel, half barrel, one bushel or multiples of the barrel or sub-multiples of the bushel divisible by two; provided, however, that fruits, vegetables and produce may be sold in other sized containers if the net capacity in terms of standard dry measure is plainly and conspicuously marked, branded or otherwise indicated in the English language on the outside or top thereof, or is marked in accordance with the provisions of section seventeen. A barrel within the meaning of this and the ensuing sections of this article shall represent a quantity equal to seventy hundred and fifty-six cubic inches or conform to the following dimensions: Head diameter, seventeen and one-eighth inches; length of stave, twenty-eight and one-half inches; bilge not less than sixty-four inches outside measurement; distance between heads not less than twenty-six inches; and to be known as a standard barrel. A reasonable variation of the capacity specified shall be allowed.

Section 17. Net contents of containers to be indicated on the outside thereof. When commodities are sold or offered for sale in containers of other sizes than those specified in section 16-a or whose sizes are not otherwise provided by statute, the net quantity of the contents of each container, or a statement that the specified weight includes the container, the weight of which shall be marked, shall be plainly and conspicuously marked, branded or otherwise indicated on the outside or top thereof or on a label or a tag attached thereto in terms of weight, measure or numerical count; provided, however, that reasonable variations shall be permitted.

Section 17-a. When sections 16, 16-a and 17 shall not apply. Sections 16, 17-a and 17 shall not apply to containers or commodities in containers with ornamentations or decorations exclusively for gifts or social favors, or to commodities dispensed for consumption on the premises, or to commodities or containers put in receptacles used merely for the purpose of carrying or delivering of commodities or containers complying with the provisions of such sections, or when the numerical count of the individual units is six or less, or in the case of liquids when the contents is two fluid ounces or less, or when the weight of the contents is three [six] avoirdupois ounces or less, or to commodities packed, put up or filled prior to eight months after this section takes effect, or to bottles used for the purpose of the bottling of spirituous, maltous, vinous or carbonated beverages until eight months after this section takes effect.

Section 17-b. Guaranty furnished by wholesaler, jobber or manufacturer. No person shall be prosecuted under the provisions of this article, following section fifteen thereof, when he can show a guaranty signed by a wholesaler, jobber or manufacturer, residing in the state of New York from whom he purchased the commodity in containers to the effect that they were not incorrectly marked within the meaning of such sections of this article. The person making the sale and guaranty shall then be amenable to the prosecution, fines and other penalties which would in due course attach to the dealer under the provisions of such sections. The name appearing

on the container and the marking as provided by section seventeen shall be deemed to constitute a guaranty.

Section 17-c. Definition of terms "container" and "person." "A container" as used in this article, following section fifteen thereof, shall include any carton, box, crate, barrel, half barrel, hamper, keg, drum, jug, jar, crock, bottle, bag, basket, pail, can, wrapper, parcel or package. "A person" as used in such section shall be considered to import both the singular and the plural and shall include corporations, companies, societies and associations, and whether acting through an agent or servant.

Section 18. Examination and prosecution. The examination of the weight, measure or numerical count of the contents of containers as provided by section seventeen shall be made by the state superintendent of weights and measures or under his supervision or direction by any of the weights and measures officials of the state; except that in the city of New York such examination shall be made by the commissioner of the mayor's bureau of weights and measures of the city of New York. When after such examination there is cause to believe that a provision of section seventeen has been intentionally violated the state superintendent of weights and measures shall, after notifying the person so accused of such accusation, certify the results to the attorney general with a copy of the results of the examination duly authenticated under oath by the official making examination. The attorney general shall cause appropriate proceedings in the name of the people of the state of New York to be commenced and prosecuted in the proper courts of the state without delay for the enforcement of the penalties therefor; except that in the city of New York the commissioner of the mayor's bureau of weights and measures shall in cases where he acts, after notifying in writing the person so accused of such accusation certify the result to the attorney general [district attorney of the county wherein such violation or violations occurred,] with a copy of the result of the examination duly authenticated under oath by the official making such accusation. Such attorney general [district attorney] shall cause appropriate proceedings in the name of the people of the state of New York to be commenced and prosecuted in the courts of the state of New York without delay for the enforcement of the penalties therefor. The state superintendent of weights and measures with the co-operation of the chief or principal weights and measures of the cities of the first class shall establish uniform tolerances or amounts of reasonable variation and shall make uniform rules and regulations for carrying out the provisions of sections sixteen, sixteen-a, seventeen-a and seventeen-b.

Section 18-a. Penalties. A person violating any of the provisions of sections sixteen, sixteen-a, seventeen, seventeen-b, shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars for the first and second violations, and by a fine of not less than one hundred dollars nor more than five hundred dollars [or by six months' imprisonment, or both,] for subsequent violations.

Section 2. Section nine of such chapter and section two hundred and sixty-three of chapter nine of the laws of nineteen hundred and nine, entitled "An act in relation to agriculture, constituting chapter one of the consolidated laws," are hereby repealed.

Section 3. This act shall take effect June first, nineteen hundred and thirteen.

BILL TO REQUIRE LABELING OF MANUFACTURER'S NAME.

While it is improbable that any food legislation will be passed by Congress before the December session, the bill introduced by Representative Campbell of Kansas in the present session to require the labeling of the name of the manufacturer upon the exterior of any article or product going into interstate commerce will probably be reintroduced and strongly urged for passage. The bill provides for the amendment of the "Act to regulate commerce," approved February 4, 1887 (the interstate commerce act). The proposed amendment will affect more vitally foods in packages than any other article of commerce. The convention of the National Canners' Association at Milwaukee in 1911 took up and discussed the question of labeling canned goods with the manufacturer's name, and the conclusion reached then, not without much acrimony, was against the desirability of this law, because it would tend to deprive brokers, jobbers and wholesale grocers who were not canners of a valuable asset in special brands and names known only in connection with their own names.

The bill as introduced and referred to the Committee on Interstate and Foreign Commerce is as follows:

"Section 1. The provisions of this act shall apply to any

person, firm, or corporation engaged in the production or manufacture of any article or commodity that enters into interstate or foreign commerce.

"It shall be unlawful for any such person, firm, company, or corporation to place upon the market for interstate or foreign commerce any product of manufacture without printing, embossing, or stenciling the name and address of the manufacturer upon such article or commodity.

"It shall be unlawful for any person, firm, company or corporation to erase or change the name of the manufacturer or manufacturers of any article entering into interstate and foreign commerce mentioned in this act.

"Any person or persons, firm, company, or corporation offering for sale or rent or otherwise disposing of any property intended for interstate or foreign commerce shall furnish therewith the name and address of the manufacturer or manufacturers of said commodity or article: *provided*, that nothing in this act shall be construed so as to prohibit such manufacturing firms placing any other name, as dealers, upon articles of manufacture *in addition* to the name of the manufacturer.

"Any person, firm, company, or corporation violating the provisions of this act shall be guilty of a misdemeanor and fined in the sum of not exceeding one thousand dollars, or imprisoned for a period of not exceeding six months, or both such fine and imprisonment, as the court may direct.

"Sec. 2. That this act shall be in effect from and after its passage."

PURE FOOD LAW AND GRAIN.

The general committee representing the grain interests of the country which went to Washington March 4th to confer with the pure food board succeeded in getting a temporary suspension of the enforcement of the pure food law against grain entering interstate commerce. The ruling of Secretary James Wilson of the Department of Agriculture on this subject is as follows:

"The necessary scientific information is not available to enable the Department of Agriculture to judge accurately of the spoilage and grading of grain and hay. In the enforcement of the food and drugs act it is necessary for the department to have this scientific information. Therefore, the secretary of agriculture has ordered the investigations necessary to secure the information. Pending the conclusion of these investigations, there will be no seizures or prosecutions recommended by the secretary of agriculture for the shipment in interstate commerce of grades of grain and hay which have for years passed current without question.

"When the investigations are concluded the results will be announced, and if it be found then that the law requires changes in commercial dealings in these commodities, reasonable time will be given for the necessary changes."

It is understood, unofficially, that July 1 is about the day that the final declaration of the attitude of the department on this subject will be forthcoming.

The general grain committee which met in Washington March 4 to take up this subject ran into a snag right at the outset. There appeared to be very decided differences of opinion among those in attendance as to the attitude of the pure food officials and when a resolution for presentation to Secretary Wilson was finally adopted it was much softer in tone and more conciliatory than any so far promulgated by grain people. The resolution referred to is as follows:

"Whereas, There is doubt in the minds of the grain and hay dealers as to the application of the pure food and drugs act of June 30, 1906, to grain and hay in their raw or natural form; and

"Whereas, The question is now pending before the courts.

"Therefore be it resolved, That pending the final decision by the court we respectfully and earnestly petition the honorable secretary of agriculture to cause an administrative order to be issued suspending the further effort towards applying said law and the rules of the department to interstate shipments of grain and hay, and that further pending such suspension, the Department of Agriculture continue its activities in arriving at a proper standardization of grades, and we will pledge for the bodies that we represent our most earnest efforts to have those standards adopted by them."

It is understood that the action of Secretary Wilson in suspending the enforcement of the pure food law against grain, at the present time, is taken more in the interest of farmer than the grain trade. The Iowa farmer is alleged to have remarked that the grain growers of the country must be protected in the disposition of the crops and that that was his chief duty as secretary of agriculture.

We are led to believe that grain people who have been disposed to look upon this suspension order as prophetic of



AT LAST.

future action on the part of the secretary are entirely wrong. Information coming from Washington is to the effect that the order is chiefly for the purpose of permitting the grain growers and dealers of the country to adjust themselves to conditions which would be brought about with the enforcement of the pure food law against grain, and that when a reasonable time has elapsed the formal order will be promulgated, indicating the position of the department on the grain question and notifying all concerns that the pure food law will be strictly enforced. The best information is to the effect that no credence is given the claim that the pure food law is not intended to apply to raw materials entering interstate commerce, as all authorities, at all posted on this subject, recognize the importance of raw materials as the source of much of the adulteration complained of in finished products.—*Flour and Feed.*

CONSTITUTIONALITY OF THE PENNSYLVANIA FOOD ACT.

The questions upon which the constitutionality of the food law of Pennsylvania has been attacked in the case of Christian

Pflaum, a confectioner of Philadelphia, were argued before the Supreme Court of the Commonwealth on April 8th. In the Quarter Sessions Court of Philadelphia, a verdict affirming the contentions of the defense on the facts was rendered. An appeal was taken to the Superior Court by the Commonwealth. The Superior Court reversed the verdict, upholding the classing of confectionery as a food, declaring that the introduction into a food of a prohibited substance as a constituent of one of the ingredients of a food is such an addition as the law prohibits, just as much as the addition of the prohibited substance by itself; affirming the power of the legislature to tolerate preservatives such as benzoate of soda and sulphur dioxide in some foods, while prohibiting them in others; also, its power to distinguish between wholesale and retail dealers, as it has done in the guaranty provision of the act.

The Interstate Malt Company, incorporated for \$850,000, has taken over the uncompleted plant of the Hansen Malting Company at Thirty-third avenue and Burnham street. Burton Hales, Chicago, is the leading spirit in the venture.

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COLLIER'S WEEKLY.

No doubt the average reader of *Collier's Weekly* believes nearly everything he reads in that paper, along with the things he reads in the other papers. Beyond its very shrewd circulation methods, *Collier's* depends largely for recognition in society (by which term we mean merely the civilized public) upon its ability to so present what appears in its pages as to impress the reader with its truth and accuracy.

And let us here make a distinction between truth and accuracy. For accuracy depends upon literalness upon however small a matter, while truth is a very comprehensive term, which takes in some of the things *Collier's* studiously avoids to print. Also, and incidentally, we believe that the editors of *Collier's*, able and shrewd as they are, must find themselves frequently imposed upon in some matters where accuracy at least is important, not because the whole truth is unavailable, but because it is difficult or irksome of access. Brain fag occasionally afflicts all editors, and some confidence men, whose whole stock-in-trade is the surface fairness and frankness, have been known to make lapses to their own undoing and to the increasing of the population of our institutions of penance and correction of morals.

If we didn't read *Collier's*, the clipping bureaus and our cordial friends and enemies would see that we were equipped with a knowledge of whatever that publication says in regard to foods, and our desk has lately been littered with clippings from *Collier's* breathing threats and slaughter. Recently an article from the pen of Mr. H. P. Willis has appeared in the pages of our co-temporary in which an attempt is made to show that Secretary Wilson of the Department of Agriculture, through "his lieutenant," Solicitor George P. McCabe, has granted undue protection to certain patent medicine manufacturers, who should have been vigorously prosecuted. The article opens with a statement likely to give the reader a misconception of the truth in regard to the publicity given the acts of the Agricultural Department with respect to prosecutions. Mr. Willis says: "Proceedings under the law were held behind closed doors, and every effort was made by the Department of Agriculture to maintain and deepen the secrecy and mystery surrounding its administration of the act." When one understands that the requirement of the law is fol-

lowed, that every person from whom a sample of suspected food or drugs was taken was given notice of a hearing at which he would be given an opportunity to present a defense to charges certified by the Board of Food and Drug Inspection, that no person so notified who desired to be heard was ever denied a full and complete hearing, and that the record of every case prosecuted in a court was published widely as a notice of judgment, the false and misleading character of this statement is seen, and it is obviously not necessary to pursue a refutation of Mr. Willis' statements any further. Some knowledge of the character and reputation of this gentleman may be learned in the closing pages of the report of the hearing before the Committee on Expenditures in the Department of Agriculture last summer, a report from which Mr. Willis quotes in a more or less labored effort to show the impropriety of the acts of Solicitor McCabe and Secretary Wilson. The hearing was about to close. Mr. Willis had gone on the stand at an earlier session and made some statements in relation to the utterances of Secretary Wilson, which, if true, would have been highly damaging to that gentleman. Secretary Wilson denied he had said what Mr. Willis said he did, and the stenographer who took down Secretary Wilson's words corroborated his statement, thereby showing that Mr. Willis prevaricated. For the rest, we quote from pages 912 and 913 of the printed proceedings, to which *Collier's* or any other newspaper or individual may have access:

MR. WILLIS: I have a request to make of this committee before it separates.

THE CHAIRMAN: Mr. Willis.

MR. WILLIS: Would you allow me to say a word?

THE CHAIRMAN: I believe I stated to you, Mr. Willis, that any statement by you could only be made with the consent of the committee.

MR. WILLIS: With the consent of the committee, I want to ask for that permission.

THE CHAIRMAN: With the consent of the committee. Mr. Willis made a request that he should like to make a statement, in view of the public statement that the Secretary had made, and I told him I would not extend permission to him of my own initiative, and if it came to him it would come by the consent of the committee. Personally, I would say it has been the understanding of the committee all the way through this investigation that there was to be no rebuttal testimony offered after Dr. Wiley and the Secretary had closed their testimony, and I shall not take the responsibility myself of setting this agreement aside. The committee may do so if they so desire.

MR. WILLIS: That is not a statement in rebuttal, but it is just what I said it was. I want to ask that the committee do something. It is not in further continuation of any testimony.

THE CHAIRMAN: I will submit, however, the request of Mr. Willis to the committee.

MR. HIGGINS: Just what is the request?

THE CHAIRMAN: The request is that he be permitted to come before the committee and make a statement, as I understood, relative to the statement that the Secretary has just now made. Is that it, Mr. Willis?

MR. WILLIS: It is relative to the matter that the Secretary brought up, but it is in no sense by way of answer, or anything of that kind. It is really a continuation of the statement I made when I was on the witness stand. I think no member of the committee will have any reason to object to anything I may say.

MR. HIGGINS: Why, Mr. Chairman, the matter that Mr. Willis testified to was with reference to what the Secretary of Agriculture said at a hearing which was held pursuant to law, and at that hearing it appears that a stenographer, whose duty it was to take the evidence, did take it—

MR. WILLIS: That is just the point of my statement.

MR. HIGGINS (continuing): And at my request that evidence has been offered to the committee. I do not want to object, but it seems to be a very idle proceeding to have Mr. Willis inject himself into these proceedings at this time. He has made his statement, and we have got the facts in the way of the original transcript of the stenographer.

MR. WILLIS: That is the very point I want to bring out, Mr. Higgins.

MR. HIGGINS: I do not care to hear you.

MR. WILLIS: I do not care whether you do or not. When I was on the stand here today—

MR. SLOAN: Well, is he in charge of this room?

THE CHAIRMAN: You can not make any statement without the consent of the committee. That has been stated to you.

MR. MAYS: I want to make this statement: Mr. Willis has been subpoenaed here and made his statement, and I, for one, move that the hearings close.

MR. WILLIS: I do not want to make any statement.

MR. MAYS: I do not want any controversy between Mr. Willis and anything the Secretary has said. He has made his statement, and I object to the statement that he wants to make.

Mr. Willis evidently has greater credibility with the editors of *Collier's* than he has with the Moss Committee, and if all the sources of information upon which that newspaper relies are in the same class with Mr. Willis, then we may hope for little truth from it, or none at all. Peradventure this is not so, for a little truth slips into *Collier's* once in a while, enough to show its untruth by contrast.

This attack upon the Department of Agriculture's administration of the food law, admittedly made as part of an effort to secure the dismissal of Secretary Wilson from President Taft's cabinet, and probably in the interest of Dr. Wiley and the "holier-than-thou" food purveyors who have clung to his coat-tails and benefited by certain of his acts, naturally brings us to an examination of the attacks hitherto made by *Collier's* on certain other men and concerns, of which *Collier's* is fond of boasting with great frequency. For the present purpose, we may pass over the famed victory by villification over ex-Secretary Ballinger and ex-Speaker Cannon, whose retirement, in the light of recent events, may be more accurately credited to other causes than the opposition of *Collier's*, and take up a subject of greater interest to our readers in the case of *Collier's* against the Postum Cereal Company, to whom that newspaper believes it has done much moral and material injury.

In all of the various phases of the controversy, it has not been claimed by *Collier's* that "grape-nuts" and "postum" are not legitimate and useful articles of food, properly branded. Both of these articles conform to the requirements of the food and drugs act and both have a large sale, so large in fact, that recently a nineteenth factory for their production has been erected. It is a fact worth considering that grape-nuts is on the bills of fare of half the restaurants of the country.

Collier's great "victory" over the Postum Cereal Company has lately gone wrong, much to the chagrin of Mr. Collier, who has indulged in some criticism of the court rendering a decision against him, that ought to be construed as contempt. Some time ago, Robert J. Collier secured a judgment against the Postum Cereal Company in a suit for libel, the basis for which was the publication of advertisements by the Postum Company in which the latter characterized certain statements printed in the weekly as "mendacious falsehoods" and charged that they were published to force the Postum Company to advertise in *Collier's*. The case was tried before a jury.

The decision of the Appellate Division of the Supreme Court of New York, handed down on February 16th, reverses the judgment, which was for \$50,000, a sufficiently large sum to make a gleeful basis for a series of editorials in *Collier's Weekly*. The reversal of this verdict would have been a good basis for the

claim that the Postum Company's advertisements were truthful in charging the newspaper with "mendacious falsehood," and extraneous evidence upon other utterances of *Collier's* might have the same tendency without straining the truth, but so far the Postum Company has refrained from exulting unduly. The opinion of the court is enlightening as to the character of the testimony introduced. It is in part as follows:

I am unable to find in the voluminous record before us any evidence whatever of the publication by the defendant of such fictitious indorsements, and, to say the least, it is open to argument whether any of the defendant's advertisements could fairly be construed as making a claim that grape-nuts would cure appendicitis.

For the obvious purpose of bridging over the weakness of the plaintiff's case on that head, the learned trial counsel attempted, and ultimately succeeded in the attempt, to make a general attack upon the defendant, its products, "postum" and "grape-nuts," and its method of advertising them.

An attempt is made to justify the course of the trial on the ground that the defendant tendered the issue by an innuendo in the answer. The meaning of an article cannot be enlarged by innuendo. Timely objection was taken by the appellant and insisted upon throughout the trial. The error was fundamental and permeated the whole case. And it seems to me that we cannot sustain this judgment without virtually holding that, in a libel suit, either party is at liberty to attack the other wholly regardless of the issues in the case.

However much our national standards of commercial and official honesty need elevating, it can hardly be said that *Collier's Weekly* is qualified to be the moral mentor of this country in such matters, in view of the criticism of its methods in obtaining a "victory" over the Postum Cereal Company in its libel suit by the New York Supreme Court, and in further view of its employment of so discreditable an agent as Mr. H. P. Willis in its attacks on Secretary Wilson.

SACCHARIN NOT PROHIBITED.

In acting upon the question of using saccharin instead of sugar as a sweetener, manufacturers who have been users of saccharin should consider several things. In the first place, by the provisions of Food Inspection Decision No. 142 the use of saccharin is not forbidden absolutely, but its use is restricted to those who prefer or require its use. In the language of the decision those are "persons suffering from certain diseases who may be directed by their physicians to abstain from the use of sugar." Just why a physician's prescription should intervene and why a person who desires to choose for himself to use saccharin as a sweetener in foods he consumes may not do so does not appear. And if saccharin is beneficial to persons in poor health, its use by healthy persons ought not with any reason to be interdicted, at least not on the grounds of healthfulness or unhealthfulness.

The real physiological effect of saccharin was indicated in the original report of the Referee Board of Consulting Scientific Experts. Subsequently, while the question was before the three secretaries, a supplemental report was made by the Referee Board that set forth more clearly its position. This supplemental report we reproduce herewith:

"In reply to your request under date of December 30, 1911, that the Referee Board discuss Food Inspection Decision No. 135, and give a definite statement showing the opinion of the Referee Board as to whether the decision in question is in harmony with the conclusions presented by the board in its report on the influence of saccharin on the nutrition and health of man, the Referee Board respectfully submits the following statement:

"1. The findings of the Referee Board, based upon what would seem to be convincing, experimental evidence, are that small quantities of saccharin, up to 0.2 gram per day, are

without deleterious or poisonous action and are not injurious to health. This being so, it would seemingly follow that foods to which small quantities of saccharin have been added—in amounts insufficient to result in a daily intake of more than 0.3 gram—cannot be considered as adulterated, since foods so treated do not contain any added deleterious ingredient which may render the said food injurious to health.

"Admitting that large quantities of saccharin—over 0.3 gram per day—taken for long periods of time, may impair digestion, such evidence cannot consistently be accepted as an argument in favor of the view that smaller quantities must constitute a menace to health. It is often claimed that any substance having a deleterious effect on health, when taken in large amount, must necessarily be injurious even when consumed in very small quantities, and that it is dangerous to differentiate on the basis of quantity. There is, however, no justification for such a view from a physiological standpoint. Common custom, for example, sanctions the free use of vinegar or dilute acetic acid as a preservative; yet it is well known that in larger quantity acetic acid is a dangerous substance. Common salt, while harmless when taken in small quantities, may become a serious menace to health, if taken in larger quantities. The hydrochloric acid of the gastric juice is not only harmless but is essential for the welfare of the body, yet when its concentration is increased beyond a certain point it becomes a poison. It is evident, therefore, that the decision as to whether a certain substance is or is not injurious to health must take into account the quantity of the substance that is involved. The Referee Board is compelled, on the basis of the experimental evidence, to hold to the view that the addition of small quantities of saccharin to food does not constitute an adulteration, since there is no evidence that small quantities of the substance are deleterious to the health of normal adults.

"2. The addition of saccharin to foods, in large or small quantities, does not, so far as the findings of the Referee Board show, affect in any way the quality or strength of the food. This statement is not in any sense contradictory to, or lacking in harmony with, the statement that the addition of saccharin to a food as a substitute for cane sugar is a substitution involving a reduction in the food value of the sweetened product and may thus result in a reduction in its quality. The simple addition of saccharin to a food cannot, in the opinion of the Referee Board, be considered as an adulteration through any reduction in the strength or quality of the food, since no such effect follows its addition to the food. On the other hand, the substitution of saccharin for cane sugar, for example, in any food product may result in a decided lowering of food value, and this must certainly be considered as an adulteration.

"In the opinion of the Referee Board the use of saccharin in food in quantities that might constitute a menace to health is improbable, since its extreme sweetness would naturally limit its consumption by the individual to amounts below what might prove injurious (in harmony with the conclusions expressed in the original report of the board). On the other hand, the possibility of substituting saccharin for sugar, thereby lowering the food value of the sweetened products, is a serious menace and one that should be carefully safeguarded."

The Secretary of Agriculture originally submitted to the Referee Board of Consulting Scientific Experts the following questions:

1. Does a food to which there has been added saccharin contain any added poisonous or other deleterious ingredient which may render the said food injurious to health? (a) In large quantities? (b) In small quantities?
2. If saccharin be mixed or packed with a food, is the quality or strength of said food thereby reduced, lowered, or injuriously affected? (a) In large quantities? (b) In small quantities?

In answer to the first question, the Board found that saccharin, in quantities in which its use as a sweetener in food was at all practical, was not an added poisonous or other added deleterious ingredient which might render the said food injurious to health, and therefore, that a food which contained added saccharin in small quantities could not be regarded as adulterated under the law.

In answer to the second question, the Board found that saccharin mixed or packed with a food did not reduce, lower, or injuriously affect the quality or strength of the said food.

In view of these conclusions of the Referee Board a food containing saccharin cannot be regarded as adulterated under the provisions of any food and drugs act similar to the Federal Act. Nevertheless, a limitation was placed upon the use of saccharin by F. I. D. 142 because of the further finding by the Referee Board that "the possibility of substituting saccharin for sugar, thereby lowering the food value of the *sweetened* products, is a serious menace and one that should be carefully safeguarded."

This raises a question which is not raised by the provisions of the Food and Drugs Act, because there is nothing in that Act which forces a manufacturer to use only material having the *highest* food values. Those who use sugar as a sweetener do not do so for the food value which may be in sugar, but they use it wholly as a condiment.

However, all such danger as is suggested by the Referee Board would be sufficiently safeguarded by a requirement that when saccharin is used there shall be a distinct statement upon the label to the effect that the article has been sweetened with saccharin and *not* with sugar.

Food Inspection Decision No. 135 prohibited the use of saccharin altogether; whereas, under Food Inspection Decision No. 142 saccharin may be used in any article of food or drink provided there is a statement upon the label to the effect that the article has been sweetened with saccharin for the benefit of those to whom sugar may be injurious, or a menace to health. Thus it will be seen that Food Inspection Decision No. 142 is a very material modification of Food Inspection Decision No. 135.

The manufacturers of saccharin propose to take legal steps to protect those who use saccharin in food products, when declared in the label, if such use should subject the users to prosecution, and steps will be taken to settle all the questions surrounding the subject in the courts.

NORTH DAKOTA'S ATTEMPT TO STANDARDIZE THE SIZE OF LARD PAILS.

An interesting situation has arisen in the State of North Dakota in connection with a statute passed at the last session of the legislature, requiring that all lard sold in packages within the state shall be put up in containers holding one pound net weight, or some whole multiple thereof, thus forbidding the sale of this commodity in the present size and style of package.

Prior to the enactment of this statute, the legislature in 1907, passed a general pure food law which required that as to all articles of food sold in package form the package should be plainly and conspicuously marked with the actual net weight of the contents. This latter law has been strictly and faithfully complied with by the manufacturers of lard by the placing upon the package, in manner satisfactory to the food commissioner of the state, a label or sticker plainly and correctly stating the actual net weight of the contents. It so happens, however, that the weight so stated is expressed in pounds and ounces as the pails are not constructed to hold the even pounds. The present size of the containers is one which has been universally used in the industry for the past thirty-five years, so that, in order to comply with the requirements of the present North Dakota statute, it will be necessary for the manufacturers to outfit their plants with machinery and appliances for the construc-

tion of pails of a different size from those at present in use, the cost of which would need to be borne by the consumers of that state, and as the volume of business of the different manufacturers in the state is small, it is a serious question with them whether they would be justified in incurring this expense. There will also arise the necessity of carrying duplicate stocks of lard at points tributary to the North Dakota market, with the attendant risk of depreciation in quality owing to the inability to move them promptly, and the necessity of the wholesale grocers throughout the Middle West, who have trade in that state also carrying duplicate stocks with the same risk of depreciation in quality.

The situation therefore, from the standpoint of the manufacturer and jobber, is one of serious import and the indications are that the consumers will be obliged to return to the use of bulk lard with the attendant insanitary conditions, rapid deterioration in quality and other serious objections to the keeping and sale of this product in that manner.

The new law is generally regarded as a radical departure from the policy of the law in respect to the regulation of the commerce of the states. It was hoped by the local dealers that the food commissioner would withhold the enforcement of the law until the questions involved were thoroughly tested by the courts, especially as there is a case now pending in the state in which all the important questions are raised, but the commissioner refused to yield to this desire and has served notice upon the dealers that, effective April 1st, he would insist upon a strict compliance with the statute, with the result that there is a general uneasiness felt in the trade as to the effect of the law upon their business. The retailer very much prefers the package over the bulk article because of the greater convenience in its handling and sale. He is not required to stop and weigh up the quantity desired, there is no loss by him in shrinkage and the product keeps fresher, brighter and cleaner for a longer period of time. The package is also a convenience and advantage to the consumer in the handling and keeping of the product for the same reasons, and because of the guarantee of the manufacturer as to the quantity obtained as shown by the label.

The dealers claim that as the law already required the marking of the package with the correct net weight of the contents, there can be no confusion or misunderstanding in respect to the quantity purchased, and, therefore, there is no occasion for further legislation upon the subject. The only justification for laws regulating the conditions of trade is when such regulation is necessary in the interest of the public health or welfare, and it is claimed that under both the state and federal constitutions the legislature is powerless to enact a valid law, the effect of which is to interfere with the right of freedom of contract, unless such interference is based upon a grave public necessity. If this position is sound, then it would seem that the right of the legislature to enact the law in question is very doubtful and would be no more justified than if it attempted to regulate the shape of the package by requiring it to be square instead of round, or the color of it by requiring it to be white.

The outcome of the North Dakota situation will be followed with interest by the manufacturers of food and other products generally as it will establish a precedent which is likely to affect many other industries. It will be very unfortunate if, as a result of this legislation, the good people of North Dakota are

deprived of a sanitary package and its attendant benefits.

FINDINGS OF FACT.

One who has read exhaustively the literature on the art of making catsup, from mother's home-made cookbook, consisting of scraps of paper sewed into book form with black thread on the family sewing machine, down to the present-day products of the brains of our food chemists and food commissioners, and those scientific-literary free lances who burden the libraries and the book counters with their theories and discoveries, is somewhat discouraged to find that there is something new to be learned that has not come within the purview of the actual students of the subject, but arrives via the witness chair and the chancery court.

In the report of the master in chancery on the now famous Indiana benzoate of soda case we read this among the findings of fact:

In order to prepare a catsup commercially without the use of benzoate of soda, there must be a heavier body to the catsup, and in order to obtain this body the skins and refuse, if used, must be run through a sieve; and this process makes it impracticable from a financial standpoint to prepare, without the use of benzoate of soda, such a catsup from putrid, rotten and decomposed tomatoes, or from factory waste, skins, cores and peelings. Where factory waste, refuse, cores, skins and peelings of rotten and decomposed tomatoes are used in the preparation of tomato catsup, not being run through a sieve they produce a thin, watery catsup, and such catsup cannot be prepared so that it will keep after opening without the use of benzoate of soda, benzoic acid or similar preservative.

A little bit involved, but there is the germ of a great truth—or the makings of a great cult. Hitherto we have believed, if we accepted some of the authorities, Professor Ladd, for instance, that benzoate of soda was for the mere purpose of signaling the presence of rotten, putrid and decomposed material. No manufacturer used it except to advertise to the world that he was using factory waste. However, this finding endows benzoate of soda with a new dignity—it is used to give body, or bulk, or presence, to the thin, watery, soupy mass of skins, cores, cuttings, etc., so that it may stand up and call itself catsup.

A little nonsense now and then seems to be relished even by the courts. Perhaps our learned master in chancery, secure in the faith that the court's lips were not chapped, wanted to give that august body a chance to smile, perchance to grin.

Naturally a substance so subtle and insidious is very properly forbidden by the Indiana State Board of Health, despite the fact that the complainants did not use it to conceal putrid, rotten and decomposed material, or to get around the financial difficulties of making a product out of thin waste. For here is exactly what they made, according to the finding of fact somewhat further along:

Neither of the complainants has ever sold, shipped or used in any way skins, cores or peelings, or inferior or rotten fruit, and in so far as either of the complainants has used sodium benzoate, it has not at any time so used sodium benzoate directly or indirectly for the purpose of preserving or concealing fruit products containing skins, cores or peelings, or inferior or rotten fruit. The natural fruit flavor of the catsups of each of the complainants makes these goods popular with the purchasing public, and this popularity is a valuable financial element in the good will of each of the complainants in its manufactured catsups. Each of the complainants states the fact to be that this natural fruit flavor cannot be obtained by it in its manufactured catsups without the use of sodium benzoate or some other tasteless preservative. Competitors of the complainants claim that they can and do obtain and keep

the natural flavor of their manufactured catsups without the use of benzoate of soda or other tasteless preservative. The testimony does not show, as a scientific fact, the basis of the claim of the complainants that they cannot obtain and keep the natural fruit flavor of manufactured catsups without the use of benzoate of soda or some other tasteless preservative. The testimony does show that manufacturers of catsups who ceased the use of sodium benzoate, after they had so ceased increased the sugar and vinegar content of their catsups.

Indiana, and any other states whose officials find themselves tempted to get into this enticing game of baiting the users of benzoate of soda, it seems to us would better examine into the possibilities of controlling the food supply, or the catsup supply, by a system of sanitary inspection. Somehow or other, it is difficult for the thoughtful man to escape the impression that benzoate of soda is not alone a cheap, serviceable, harmless preservative, but a great scientific discovery, for our present day treatment of which future generations will laugh at us.

THE PARTING SHOT.

Among the reasons given by Dr. Wiley in his public statement of the basis of his resignation as chief of the Bureau of Chemistry, as set forth by one of his personal organs, are these:

That the fundamental principles of the [food and drugs] law one by one, have been paralyzed and discredited.

That the activities of the Bureau of Chemistry were restricted. * * *

That the chief of the bureau was instructed not to discuss openly matters relating directly to the public welfare.

If the provisions of the food and drugs act gave the Bureau of Chemistry any part in the administration or enforcement of the act, then Dr. Wiley's plaint is reasonable and sound. Under such a construction of the law, he should have something to say about how the law should be enforced and if the things he thought ought to be done were not done and the differences with his superiors and associates were fundamental, he would be perfectly right in protesting or resigning, or both. But, under the law, the Bureau of Chemistry and its chief have absolutely nothing to say in regard to the enforcement of the law. The only function of the bureau is to find the facts and report them to the Secretary of Agriculture. By frequent reiteration in the daily press, the impression has gone forth and become general that Dr. Wiley was given the right to initiate prosecutions, establish standards and do anything else under the law that he wanted to.

His letter of explanation of his resignation is designed to extend the public belief in this assumption, which is wholly false.

As an explanation of his act for the satisfaction of his wide circle of followers and syncophantic worshippers, it is probably as good for the purpose as any other explanation. But with those who know the facts, not only as regards the law but as regards Dr. Wiley's whole course as chief of the Bureau of Chemistry, particularly since the passage of the food and drugs act, Dr. Wiley's effort to pose as a martyr in the pure food crusade and the victim of a conspiracy to throttle the food law is too diaphanous.

The least creditable part of his whole career as a

public official is his explanation of his reasons for resigning his office.

CHANGES IN NEW YORK DEPARTMENT.

Commissioner of Agriculture Calvin J. Hudson of New York, who succeeded Dr. Raymond A. Pearson, announced on April 2d the appointment of George L. Flanders to be counsel to the Department of Agriculture. Mr. Flanders has been Assistant Commissioner since the organization of the department twenty-eight years ago, and during practically all of that period has had charge of the legal questions involved in the enforcement of the agricultural law. His appointment as counsel is a fitting recognition of his long and faithful service, and his high legal attainments.

It is also announced that Harry B. Winters has been appointed First Assistant Commissioner of Agriculture to succeed Mr. Flanders. Mr. Winters, a native of Tioga County, was educated at Phillips Academy, Andover, and at Cornell University. For thirteen years he was manager of the Winters Farm at Smithboro and later became general manager of the largest certified milk farm in the world. Mr. Winters came to the department in February, 1911, as inspector of the forty farms connected with the state institutions. He is president of the New York State Plant Breeders' Association, treasurer of the New York State Agricultural Society and a director of the Certified Milk Producers' Association of America.

Dr. Pearson, who resigned as Commissioner of Agriculture after four years of service, came originally from Cornell University. He leaves the department to accept the presidency of the Iowa State College of Agriculture.

"IMITATION" VINEGAR.

Food Inspection Decision No. 140, describing vinegars, seems to have been framed not only to meet the conditions of manufacture but to require certain conditions of marketing likely to benefit some manufacturers and injure or handicap others. It is likely that this decision, if it is seriously planned to enforce all its provisions, will have to be modified or remodeled, judicially or otherwise, in accordance with other decisions. For example, under the last decision on whisky, Food Inspection Decision No. 113, it is possible to add harmless coloring matter to whisky without labeling it "imitation." By the terms of the vinegar decision, no provision for artificial coloring is made other than to impose the classification of imitation. So that a distilled vinegar to which color is added must be called "imitation vinegar," however genuine it may be without the coloring matter, which may have absolutely no influence on its character.

NEW MEMBER OF FOOD INSPECTION BOARD.

Dr. A. S. Mitchell, chief of the St. Paul Laboratory of the Bureau of Chemistry, on March 19th assumed office as a temporary member of the Board of Food and Drug Inspection to fill the vacancy caused by the resignation of Dr. Harvey W. Wiley. Dr. R. E. Doolittle remains acting chief of the bureau and chairman of the board.

Household Science and the Table

THE ORANGE—FRUIT OF GOLD AND GLAMOUR.

By Eleanora Elizabeth Reber.

There is something about an orange grove with trees hanging full of luscious looking globes of golden-colored fruit that arouses all the poetry in one's nature and tends to make one speak in words of superlative degree. Perhaps it is because of the contrast it presents to the mind's eye of so many of us who live in the temperate climates where oranges do not grow as we remember what the scene at home is at the same moment. Many people choose that special time for a trip to the orange growing country when in most parts of the world the icy blasts of winter rage, and there is left behind on the other side of the mountains, a mantle of snow so widespread that it seems as though it must cover the whole world.

Then when the traveler to the warmer clime wakes up one

that of the olive, fig, date, grape, etc., is a mere upstart! The orange is a comparative stranger to that part of history that is so far in the past that it begins to fade into mythology with the line of demarcation between fact and fiction becoming more and more obliterated.

Yet even as "size does not constitute greatness," neither does age indicate an indisputable title to superiority, and we find this "upstart" orange family has superseded in favor of "kings and potentates," as well as the great army of common people, many of its more anciently established compatriots.

We are told that the orange was originally a pear-shaped fruit about the size of a common wild cherry and the present fruit is the evolution resulting from hundreds of years of cultivation.

At a remote period, perhaps a thousand years ago, oranges were cultivated in Hindustan and carried to southwestern



GATHERING THE ORANGE CROP AT REDLANDS, CALIFORNIA.

bright morning and finds himself gazing in delight and rapture upon acres and acres of golden-laden trees it truly seems at first as though some fairy hand with a magic wand transported him to a region where fruits and flowers with all their beauty and perfume are perennial. Even to those who live throughout the years in those favored semi-tropic spots where grow the orange and the olive and the magnolia; the pomegranate, the fig, and many other trees and plants long associated with poetic muse and languorous enjoyment, the spell cast by the full-fruited orange grove remains, and the charm of life in the heart of the orange country is ever a constant presence.

There are a number of kinds of fruit which can claim an older lineage than the orange, whose family compared with

Asia presumably by the Arabs. Ultimately the tree spread through the agency of the same race to Africa and to Spain, and the historian tells us that it was taken to Sicily, "following everywhere the tide of Mohammedan conquest and civilization."

In the 12th century the Bigarade or sour orange was abundantly cultivated in all the Levant countries. The introduction of the sweet orange, which is cultivated here exclusively, must have been accomplished at a much later period, as no allusion to it is found in contemporary literature at that time. It was much cultivated in the sixteenth century, however, and has since then come to be commonly produced in commercial quantities in all those parts of the world having soil and climate adapted to the growth of the tree.

In the United States, California and Florida are the largest producers of oranges, with the first named state far in the lead in point of quantity of output. The navel, which is grown more extensively than any other variety, and is a seedless orange, was introduced into this country from Brazil less than half a century ago, but so perfectly adapted to our conditions did it prove, and so fine in quality has it been developed, that it is far in the lead of all others in popular favor.

The majority of people who have never been where oranges are cultivated probably think—if they take the trouble to think about the matter at all—that little time and attention is necessary to handle the fruit in preparation for the market. It is, however, a task requiring more painstaking care and unwavering attention than appears at first thought. Every effort is made to keep the fruit clean and as free as possible from dust during the months that it is maturing, and in this effort the roads receive much attention, and those that divide the orange groves are oiled or sprinkled throughout the season, with this idea in view.

Each orange is clipped carefully from the tree when it



A CLUSTER OF ORANGES.

is ripe, and throughout the process of picking and packing is handled as carefully almost as though the golden globes were as brittle and perishable as eggs. This is necessary because even a slight bruise on the skin of the orange may start decay and the fruit has so long a journey to make from tree to market that it behooves the producer, who desires to receive the top market price for his fruit, to do his utmost to prevent deterioration in appearance or quality.

From the groves the oranges are hauled in spring wagons over smooth roads with as little jarring as possible to the packing house, where the fruit is washed or brushed or wiped, then mechanically graded as to size. All bruised, mis-shaped, under or over-sized specimens are discarded, and the perfect, uniform fruit is turned over to nimble-fingered women packers, who wrap each orange in a separate piece of tissue paper and arrange in the shipping box, a uniform method being used in packing; that is, each box of oranges has the fruit arranged in the same position, and each box contains but one size of fruit.

Thus not only nature, but man as well, has done his part to make of the orange our most ornamental fruit. A fruit centerpiece on the table would not be complete without a



ORANGES AU NATUREL.

generous number of golden oranges, and in whatever manner they are served the fruit pleases both the eye and the palate.

The place of the orange in our diet is an important one, it being chiefly valuable for the acid and mineral constituents, which are important if one would maintain health and provide a well balanced ration for the family. Technically the orange is analyzed as follows: Water, 63.4 per cent; waste, 27 per cent; carbohydrates, 8.5 per cent; protein, 0.6 per cent; mineral matter, 0.4 per cent; fat, 0.1 per cent.

While the orange is in some respects an aristocrat among fruits it is also adapted to many uses and every meal. Breakfast, luncheon and dinner all are equally graced with the addition of the orange. For breakfast they are usually served au naturel, sliced, or separated into sections. An attractive way of serving when something especially ornamental is desired, is to make baskets of the peel, using the unbroken halves, tied together with a ribbon, or cutting into fancy shapes and serving in the cases, ice or jelly in which the juice of orange is used. One way to make fancy baskets is described as follows:

Draw a circle around an orange and cut the fruit through save for an inch right in the middle of each side for the handle. Cut away the skin along each side of this handle and carefully remove the pulp of the fruit from the spaces left. Throw these rinds into ice water so they will not dry out before ready for use. For filling for these baskets strain the juice of oranges and for each pint allow half a box of gelatin softened in a half cupful of cold water, and dissolve in one cupful of boiling water, one cupful of sugar and two tablespoonfuls of the syrup from a bottle of Maraschino cherries. Mix all together and pour into a shallow pan to become firm. Before it is entirely hardened press into it the halves of Maraschino cherries, placing them about an inch apart. When ready to serve cut this jelly into cubes, fill the orange shell baskets and add to each a tablespoonful of Maraschino flavored cream. The handles of the baskets may be twined with smilax or tied with ribbon to match the dinner or luncheon color.

A dainty morsel for afternoon tea is crackers or wafers spread with orange marmalade, put together sandwich fashion, and heated in the oven just long enough to allow the



ORANGE SHORT CAKE.

flavor and juice of the fruit to penetrate the cracker and soften it slightly.

Orange shortcake is delicious if the cake is made as one makes it for strawberries, using the sections of oranges for filling and arranging a row around the edge of the top, putting whipped cream in the center on top of the cake.

The following recipes are but a few of the many that might be given for utilizing oranges. Indeed, there are so many orange recipes available that one enthusiast has compiled a book which contains an orange recipe for every day in the year.

To make an orange sauce, which may be used for various kinds of puddings, use two cupfuls of hot water, one cupful of sugar, two heaping teaspoonfuls of cornstarch, one beaten egg yolk and the oil and juice of one orange. Score the orange with a silver fork, being careful not to prick the bitter white part. Put the orange in a sauce pan, roll the orange in it and let stand ten or fifteen minutes, then rinse off the hot water to extract the oil. Halve the orange, extract the juice through a strainer into a saucepan and boil, stirring in the cornstarch, wet in a little cold water, then add the egg, beating briskly.

ORANGE SOUFFLE.

Peel and slice six oranges; put in a glass dish a layer of oranges, then one of sugar and so on until all the orange is used, and let stand two hours. Make a soft boiled custard of the yolks of three eggs, one pint of milk, sugar to taste, with grating of orange peel for flavor, and pour over the oranges when cool enough not to break the dish; beat the whites of the eggs to a froth, stir in sugar and put over the pudding.

ORANGE FRITTERS.

These are delicious served alone, used as a dessert, or some think them best of all as an accompaniment to boiled ham. Peel and slice oranges, removing seeds and core. Dip at once into a good fritter batter, fry in deep hot fat, or, if preferred, in ham fat drippings in the frying pan, and when brown drain on paper and serve at once. A good fruit fritter batter is made by using one cupful of sifted flour, a teaspoonful of baking powder and a saltspoonful of salt thoroughly mixed by sifting through the flour sifter. Into this pour one beaten egg, half cupful of milk and the same amount of sugar if desired to have the batter sweet. Make all into a smooth batter.

ORANGE CHARLOTTE.

Take one-third of a box of gelatin, one-third cupful of cold water, one-third cupful of boiling water, one cupful of sugar, the juice of one lemon, one cupful of orange juice and pulp and the whites of three eggs. Line a mold or bowl with ladyfingers or sections of oranges; soak the gelatin in cold water until soft, then pour on the boiling water and add the sugar and lemon juice. Strain and add the orange juice and pulp with a little of the grated rind, cool in a pan of ice water. Beat the white of eggs stiff and when the orange jelly begins to harden beat it until light. Add the beaten egg whites and beat all together until stiff enough to drop. Pour into the mold. A pint of whipped cream may be used instead of the whites of the eggs, or it may be piled on the top after the charlotte is removed from the mold.

ORANGE MARMALADE.

To each four oranges add three-fourths of a lemon. To each pint of the fruit add one quart of water, and let stand for twenty-four hours, then boil all until tender. To every pint of this boiling add one and a half pounds of sugar and boil again until transparent.

The Month of Appetizers and Relishes.

April might most appropriately be termed the month of relishes and appetizers, for it is during the first weeks of spring when the heavy foods which were found so satisfying and necessary during the cold of winter become more or less distasteful, even in thought, and the appetite craves the bitter and pungent flavor. Along with the popularly called "spring fever," affecting the physical feelings of so many of us, comes the jaded appetite which must be tempted and encouraged with foods that come dressed in tart sauces and juices. Salads of dandelion and spinach are popular because one may with impunity add more of vinegar to them than would be advisable for other kinds of salads. Ketchup, mustard, horseradish, tabasco, etc., are more generously used during this month of April.

For breakfast a nibble of some salted fish with the regular menu is relished. There are, for instance, numerous ways of treating salt codfish. Just a simple, homely mince of salt codfish and potatoes, fish hash—to speak plainly—is well

seasoned and browned, with a little browned butter having lemon juice or vinegar and mustard in it poured over all as it goes to the table, makes the offering a very different thing from the minced fish so commonly served. Or the fish balls of other days may be made into croquette-shaped affairs and served with tartar sauce; or the same browned butter just suggested, with mustard in it, will be relished out of all proportion to the trouble it takes to make them.

For luncheon in April much may be made of sardines. Broil them, apply lemon juice heated and used bountifully, and sliced olives, gherkins and capers may be used with the sardines in combination in many ways.

Pickled pears and peaches are popular in April though they may not have been in months previous. Indeed, all classes of pickles find special favor at this time. Pickled lambs' tongues sliced with olives and given a flavor of onion, or dressed with tartar sauce makes also a most acceptable April dish.

Rhubarb.

The first rhubarb of early spring is always welcomed by the thrifty housewife tired of the poverty of garden products in winter. Though rhubarb is neither a vegetable or a fruit, but a leaf stalk only, it has all the properties of delicious fruit and serves fruit's purposes in almost every way where tarts and pies, jams and puddings are concerned.

Nothing of the rhubarb plant is eaten save the foot-stalks of the enormous leaves. These leaves require much feeding from the soil in order to develop and the stalks are full of cells in which strong acids are elaborated and that found in rhubarb is of a very beneficial character. There is potash, too, present in the rhubarb, and this forming a union with the acid makes a healthful salt of power, which it is claimed restores to the blood lost vitality, rendering it capable of coping with the work of the body.

The saline matters of rhubarb are present to the extent of a half pound of strong salts to each hundred pints of juice. This does not appear such a great quantity, but it is of so keen a nature that its effect is extremely potent.

It is chiefly on account of the saline substance in the rhubarb that it has power to figure so largely as a healthful agent in cookery. Rhubarb has also laxative properties and its acids cause digestive processes to go on briskly by disintegrating the particles of food, and by causing a good flow of the necessary digestive juices, beginning with the saliva of the mouth.

Rhubarb blends admirably with almost any other fruit, but most particularly with such as contain malic acid, as the apple; or citric acid, as the lemon. It takes the flavor of any volatile spice, as ginger or cloves, and with figs, makes a good confection.

Rhubarb having no trace of oil in its constituents, accompaniments of such foods as have that element are desirable when serving it. While there is no flesh making power in the edible part of the plant still energy is generated by the food to a limited extent, and a hundred pounds of rhubarb cooked plainly without the addition of sugar would yield two pounds of glucose. Though this two per cent of sugar is present in the juice of raw rhubarb it is quite unable to exercise its powers of sweetening on account of the overpowering strength of the salts, which are in proportion but a quarter of the amount of sugar, yet can completely disguise the sugar and cover its presence. As rhubarb is always cooked with a great amount of cane or beet sugar its power as a warmth-giver and energy-producer is intensified, and it becomes a valuable food on this account.

The Origin of the Menu Card.

An interesting story is told of the origin of the menu card so universally in vogue at not only elaborate banquets, but every hotel or restaurant which makes any pretense of being first-class and up-to-date. According to the story at a dinner given by the Duke of Brunswick in 1541, he was seen to every now and then consult a long slip of paper which he reposed at the side of his plate. One of the Duke's guests asked what the paper was for and he explained that it was a sort of program or catalogue of the dishes he had commanded from the cook, "to the intent that if some delicacy, which especially appealed to his appetite, were marked for a later stage in the repast, he might carefully reserve his appetite for it."

The simplicity and utility of the idea at once took the fancy of the Duke's cronies, and the menu card from that time became an institution. The new fashion was so much admired that it was at once adopted in England and France, and since has been universally adopted all over the world.

Survey of the Food and Drug World

Worldwide Advance in Prices.

It is shown that the United States is not alone in facing the problem of the high cost of living, although the international investigation has only commenced. The reports received by the Department of State at Washington, which is collecting this information, show plainly that the retailers in European cities from which reports have been received share in the high cost of living and prices have been advanced nearly as much as here.

The inquiry was conducted at the President's direction by the State Department through its consular offices. Comparisons of prices charged for staple food products are given for the last twelve years.

The report shows that in London, from 1896 to 1910, wages increased 11.1 per cent and food prices 19.5 per cent.

France, says the report, has fared no better. "The increase in the cost of living," says the American consul general at Paris, "has become the most generally absorbing topic of discussion by the people of northern France."

The report reviews the struggle made by the English consumer through the medium of co-operative societies to combat this increase in prices.

The co-operative movement dates back to about 1860. In 1862 there were 400 co-operative societies in Great Britain, with a membership of 90,000. Their sales, aggregated \$1,165,000, with net profits to the societies of \$825,000. As compared with this in 1908 there were something over 3,000 societies, with a membership of 2,701,000 and their value of sales had increased to \$615,000,000. Their net profits in 1908 were \$14,985,000.

A series of figures relating to general groceries compiled by the Co-operative Wholesale Society of Manchester, England, gives an example of what the rise in the cost of provisions meant to an ordinary family. Taking the table as a whole it appeared that as compared with 1898 the increased cost of living in 1910 was 13.36 per cent.

The consuls at Havre, France, Berlin, Germany, and other cities of these countries reports show that food prices have with the exception of two or three articles advanced greatly in the past ten years.

Subsidy for Argentine Frozen Meat Plant.

The following is a translation of a law which has passed the two legislative bodies of Argentina, providing for a premium to be paid for the establishment of a frozen meat works:

The Senate and Chamber of Deputies, etc., approving:

Article 1. The government of the nation is for the encouragement and exportation of meat preserved by the use of low temperatures authorized to accord a premium to the first refrigerating company established in the province of Entre Rios.

Art. 2. The premium shall not exceed 2 pesos national money (85 cents United States currency) for each bovine animal, and 20 cents national money (8½ cents United States currency) for each sheep that as meat shall be exported by the works.

Art. 3. The sums that the government shall pay as premiums shall be represented by deferred stock or deferred preference shares, according to the form of constitution adopted by the company.

Art. 4. When the profits of the company shall reach an equivalent to 6 per cent on the capital paid up during the course of its operation, after setting aside 2 per cent of the gains, as determined by the commercial code, the balance shall be applied to the redemption at their nominal value of all the stocks or preference shares represented by the premiums received.

Art. 5. All lands necessary for the refrigerating works and its dependencies, up to an extension of 1,000 hectares (2,470 acres), are declared expropriable for purposes of public good.

Art. 6. The expropriation referred to in the preceding article shall be made on petition of the company which shall pay the price of the land and the further expenses in cash.

Art. 7. The expenses incurred by the execution of this law shall be included in the budget of the year immediately following that of the founding of this industry.

Art. 8. This present law shall be null and void if after two years from its promulgation no company shall have taken up the benefits in it offered.

Paprika or Pimento Trade of Spain.

Spice millers in the United States seek information regarding the preparation of paprika or ground Spanish pimentos, which are raised in the Valencia district of Spain.

A dispute of long standing has existed between the Spanish farmers who grow the pimentos on the one hand and the millers and merchants on the other regarding the practice of adding olive oil to paprika. The farmers have always opposed the practice, which they regard as adulteration, and frequently invoked government action to have it declared illegal. The evidence accumulated at the various government investigations, however, failed to establish the growers' contention that the practice of adding a little pure olive oil was in any way harmful or prejudicial to health, while millers and dealers in the product maintain that a little oil is necessary for the better preservation of paprika and to minimize waste in handling and packing. The oil imparts cohesion to the mass and prevents the considerable loss which takes place in handling and transporting dry ground pimentos in jute bags to packing stores and to the interior of the country and Spanish island possessions.

The latest official regulations on the subject prohibit the admixture of oil with pure paprika.

The trade, both home and foreign, in paprika is increasing yearly, as it not only enters largely as flavoring and coloring matter in all the sausage factories of this country, but is exported to Argentina and other South American republics, Cuba, Austria, France, Germany, and the United States.

British Standard for Vinegar.

In a letter addressed to the Secretary of the London and Country Vinegar Brewers' Association, the assistant secretary of the local government board states that in the opinion of the board the following definitions might properly be adopted:

General standard for vinegar: Vinegar is a liquid derived wholly from alcoholic and acetous fermentations; it shall contain not less than 4 grams of acetic acid in 100 cubic centimeters of vinegar; it shall not contain arsenic in amounts exceeding 0.0143 milligram per 100 cubic centimeters of vinegar, nor any sulphuric or other mineral acid, lead, or copper, nor shall it contain any foreign substance or coloring matter except caramel. Malt vinegar is derived wholly from malted barley or wholly from cereals, the starch of which has been saccharified by the diastase of malt. Artificial vinegar: Artificial vinegar is any vinegar, or substitute for vinegar, containing or derived from any preparation containing any added acetic acid which is not wholly the product of alcoholic and subsequent acetous fermentation. It shall contain not less than 4 grams of acetic acid in 100 cubic centimeters of the artificial vinegar. It shall not contain arsenic in amounts exceeding 0.0143 milligram per 100 cubic centimeters of artificial vinegar, nor any sulphuric or other mineral acid, lead, or copper, nor shall it contain any foreign substance or coloring matter except caramel.

Egg-Laying Competition in Tasmania.

Egg-laying competitions under government auspices in Tasmania are proving a successful means of promoting much popular interest in the subject of intense egg production and are serving as object lessons to poultry raisers as to the methods which give the most profitable results. Two of these contests, each lasting a year, have already been concluded, and a third will terminate in May, 1912. In the last competition held the average cost of feeding each bird was \$1.54 and the average value of the eggs per bird was \$3.59, the average price per dozen being 25 cents. The profit per bird of the winning pen was \$4. In the first competition the winning pen of six birds, White Leghorns, laid 1,248 eggs, and in the second competition first place went to a pen of Black Orpingtons, which laid 1,318 eggs.

Egg production in Tasmania has improved considerably during the past few years. Some few years ago this state, although it contains no large center of population, could not supply itself with eggs, and imported from the mainland of Australia. Now Tasmania exports eggs to the other states and has an increasing trade in supplying ships' stores.

Foreign Potatoes Dangerous to Use for Seed.

A bulletin of the Department of Agriculture says:

"Although home-grown seed potatoes are selling at high prices, foreign-grown potatoes should not be substituted for them. The following statement on the danger to the American potato crop from use of imported seed potatoes is made:

"Europe has several potato diseases not now known to exist in this country, which, if introduced, might be the means of greatly reducing our annual yield of potatoes. Should these diseases become prevalent throughout the United States, the cost of producing future crops might be very greatly increased.

"Do not, therefore, under any circumstances use foreign-grown potatoes for seed either at the north or at the south. The sorts which are coming to this country at the present time are late sorts and are not adapted to planting in the south, where early potatoes are the main crop, neither are they adapted to planting at the north, for they will not produce a satisfactory yield.

"They are not adapted to our soils or to our climate, and will not yield profitable crops; but the danger of introducing diseases not now present is sufficient reason for refusing to plant them."

British Columbia Herring Catch Small.

Under the Canadian regulations the herring season closes March 1. The herring did not commence running till late in the past season, and fishermen were hopeful that the closing date might be postponed, but, as the fish had commenced to spawn, the closing regulations were rigidly enforced, that next season's run might not be impaired.

During 1909-10 the catch at Nanaimo, the headquarters of the herring industry reached 25,000 tons. A great deal of this found a market in the Orient, where there is always a good demand for British Columbia fish, while a quantity was shipped to the United States, some to eastern Canada and some to England. During the 1911-12 season, just closed, the packers at Nanaimo shipped for export only about 12,000 tons of herring. No cause has been found for the scarcity of herring in the waters from Nanaimo, although some have advanced the theory that the presence of whales in the vicinity drove the smaller fish into shallow waters.

Bill to Bar Adulterated Seeds.

In a statement before the House Committee on Interstate Commerce on March 26 Representative James R. Mann of Illinois strongly urged the committee to take favorable action with regard to a bill which he has framed for the purpose of regulating foreign commerce in adulterated seeds. The committee expressed strong interest in the bill and various members made suggestions and criticisms which Mr. Mann undertook to meet. He proposes to reintroduce the bill with these modifications embodied in it. The principal changes will relate to the time when the bill is to take effect, which will be regulated in such a way as to exempt this year's crop from the operation of the measure.

The probabilities are that the bill will be reported and adopted before the close of this Congress, although action may not be had until the short session. The bill prohibits the importation of adulterated alfalfa, barley, blue grass, buckwheat, oats, wheat, etc.

President of Retail Grocers on Net Weights.

John W. Lux, president of the National Association of Retail Grocers, writes to the membership of that organization as follows:

"During the last year the National Wholesale Grocers' Association and the National Association of Retail Grocers have been instrumental in having introduced bills in Washington compelling the manufacturers to state the net weight of goods on all containers. At the present time our bill is in the hands of a committee, which does not seem inclined to do anything with it.

"The National Wholesale Grocers' Association has sent out a letter advising the members of its organization to brand all of their private label goods with the true net weight of the contents. I would advise also that the retailers look into this matter thoroughly when purchasing goods and if necessary take advantage of the guaranty clause in the pure food law.

"A number of the states have enacted state laws, some of which are at variance with other states, and I would advise until such times as a law is passed by the federal congress to use all caution in buying goods and to live strictly up to the rulings of the food commissioners of the state."

Good Housekeeping Show in Chicago May 2.

Woman will come into her own in Chicago when the First Annual Household Show will open its doors at the Coliseum on May 2. The exhibit will include every known appliance designed to make housekeeping easier, more sanitary and more congenial. A feature of especial interest will be a \$10,000 model home, completely furnished in the most approved manner and scientifically ventilated.

Mrs. Freeman E. Brown and other prominent club women will conduct a tea room where guests may secure light lunches and refreshments. The proceeds of the sales will be devoted to charity.

The show will be open daily, including Sundays, from May 2 to 12. Hand's band will furnish music at afternoon and evening concerts.

Must Be Straight Vinegar in Kansas.

By a vote of two to one the government pure food board holds that vinegar may be "pure" and still be diluted with water, but that the label must state that water is added, and that the acidity must not be reduced to less than 4 per cent.

But this ruling will not go in Kansas. The Kansas statutes absolutely prohibit the use of water in vinegar. Here is the Kansas law, enacted in 1901:

"Adulteration of cider vinegar. Every person who manufactures for sale or exposes for sale as cider vinegar any vinegar not the product of pure apple juice known as apple cider, or vinegar into which any deleterious substances, drugs or acids have been introduced, shall for each offense be punished by a fine of not less than fifty nor more than one hundred dollars."

National Convention of Wholesale Grocers.

The sixth annual meeting of the National Wholesale Grocers' Association will be held in St. Louis May 15, 16 and 17. Alfred H. Beckmann, secretary of the organization, has sent out a letter urging all wholesale grocers to so arrange their business that they can attend the meeting, which will excel all others in matters of interest to the trade of the whole United States. Never in its history has the association been in such a flourishing condition both as to finances and membership, as at present, the latter counting forty-six states out of forty-eight.

Oleomargarine Legislation Postponed.

The House Committee on Agriculture at Washington has decided to postpone until next December consideration of the bills before it affecting oleomargarine. This committee has had these measures under consideration for many months. The oleomargarine interests, backed by consumers, have demanded the removal of the 10-cent tax on oleomargarine and other legislation, giving the product a fair chance against butter on the market.

Law to Curb Sale of Cheap Candy Planned.

Alderman Frank P. Danisch of Chicago is seeking to prevent or at least restrict the sale of impure or suspiciously cheap candies. He is working on an ordinance to this end and will introduce it before the Health Committee of the council.

Alderman Danisch said he was forcibly impressed with the need for some regulation of the sale of cheap candy by seeing a little girl dividing five or six long strings of "licorice candy" among as many children. Alderman Danisch inquired the price.

"Cost a cent," said the child.

"How that quantity of candy for 1 cent could be fit for human consumption is more than I can understand," said Alderman Danisch.

National Association of Retail Grocers' Convention.

The fifteenth annual convention of the National Association of Retail Grocers of the United States will be held at Oklahoma City, Okla., April 22, 23, 24, 25, 1912. The convention will begin at 9:30 o'clock on the morning of Monday, April 22, at the convention hall, with its first business session, and will be called to order by the president of the Oklahoma Retail Merchants' Association. The annual report of the executive officers will be submitted and the program will follow the plans provided by the constitution and by-laws of the association. The Skirwin Hotel has been selected as the headquarters of the convention.

Cereal and Other Crops Abroad.

A cablegram, dated March 23, 1912, from the International Institute of Agriculture, Rome, Italy, has been received by the

United States Department of Agriculture, giving the following information:

"The area of winter wheat harvested in British India is 29,444,000 acres; in countries having 40 per cent (94,000,000 acres) of the total winter wheat area last year, the area this year is 102.2 per cent of last year. Winter cereal crops are in good condition. In British India a preliminary statement of the production of rice is 521,992,000 hundred weight (58,463,104,000 pounds), and of cleaned cotton, 11,196,000 hundred weight (1,253,952,000 pounds)."

Amendment to Maryland Food Law.

Important amendments to the pure food and drug law of Maryland are to be introduced into the House soon by Dr. Josiah Bowen of Baltimore County. The amendments, which have the backing of the State Board of Health, were prepared by the pure food commissioner, Dr. Charles L. Caspari. The amendments materially strengthen the law. One of them sets forth the standards for the quality, purity and strength of all food products sold, used or eaten within the state. Another raises the annual appropriation for salaries and expenses from \$15,000 to \$25,000. An additional section is added whereby any person who manufactures or sells any drug or article of food included in the act who shall refuse to deliver to any inspector or analyst a sample of such product when a tender of the value of the sample is offered shall be guilty of a misdemeanor and punishable by a fine of not more than \$50.

Large Butter Making Plant for Illinois.

The Dairy Farm Products Company is the purchaser of the old plant of the John F. Jelke Company on Union street near Grand avenue, Chicago, and plans to convert it into the largest butter making establishment in this country, with a capacity of 100,000 pounds a day.

The concern, which makes process butter, has five plants now in operation in Owosso, Mich., Kenton, Ohio, Rockford, Elgin and Chicago, it being the purpose to abandon the latter with the opening of the new plant.

Planning to Boom Raisin Day.

The Raisin Day Committee of the Chamber of Commerce of Fresno, Cal., has opened the campaign which has for its object the making of April 30, "Raisin Day," a subject of nationwide interest to distributors and consumers of this fruit. The committee has arranged to bring the matter home to the bakers and confectioners of the United States through the medium of the several publications devoted directly to the interests by showing just what April 30 means.

Communication

CHICAGO, April 12, 1912.

To the Editor of the AMERICAN FOOD JOURNAL: After six years of investigation and inquiry the United States Board of Food and Drug Inspection has formally decided that vinegar means cider vinegar only. It defines it as follows:

"(1) Vinegar, cider vinegar, apple vinegar, is the product made from the alcoholic and subsequent acetous fermentations of the expressed juice of apples."

That is how our American scientists define it. Compare it with the English definition, viz.:

"Vinegar is a liquid derived wholly from alcoholic and acetous fermentations; it shall contain not less than 4 grams of acetic acid in 100 cubic centimeters of vinegar; it shall not contain arsenic in amounts exceeding 0.0143 milligram per 100 cubic centimeters of vinegar, nor any sulphuric or other mineral acid, lead or copper; nor shall it contain any foreign substance or coloring matter except caramel."

The English definition states the fact: "Vinegar is a liquid derived wholly from alcoholic and acetous fermentations."

The American definition states the reverse of the fact and designates it as "only the product secured by the alcoholic and subsequent acetous fermentation of apple juice."

As the apple juice vinegar constitutes less than 25 per cent of all the vinegar used in the country, as it is worthless for the pickling of vegetables or preserving of meats, as it is made from a grade of apples which should not be used for any form of food, and is used in open disregard of the plain terms of the law, it is astonishing that scientific men should

formally commit themselves to such a definition.

They go farther. They say that adding boiled cider or coloring matter (caramel) to other vinegars is for the purpose of concealing inferiority and shall be prohibited. They say that mixing boiled cider or burnt sugar with a pure distilled vinegar is adulteration, because it imitates a *superior* article and cannot be sold, even if the brand correctly describes the mixture. Distilled vinegar is the purest form of vinegar which can be made. Apple vinegar is made from that part of the product of the orchard which is left after all the edible apples are selected from it. It is made from the unripe, worm-eaten and rotten fruit which cannot be otherwise used. It is vastly inferior for all purposes to the distilled vinegar, yet the addition of boiled cider or caramel to the pure article is prohibited because it is supposed to imitate the rotten apple product and is used to conceal inferiority.

In fact, the colored distilled vinegar no more imitates apple vinegar than it imitates sugar vinegar, or corn sugar vinegar, or any fermented vinegar not distilled. Is distilled vinegar inferior to these? Upon what ground does the Board of Food and Drug Inspection reach the conclusion that distilled vinegar is inferior to the apple vinegar of commerce? If it be not in fact inferior, upon what ground does it prohibit the coloring by caramel, if the package is plainly marked and truthfully describes the contents?

If it be done to protect the apple vinegar from the competition of an article which costs less, the action is futile, for glucose vinegar, sugar vinegar, corn sugar vinegar, etc., all of amber color, are forced into the market as competitors because the colored distilled vinegar is forced out; and all these are inferior to the distilled article.

Apparently the basis of their decision is their belief that there is only one good vinegar and that the consumer, going into a store to order vinegar, means cider vinegar. To the extent that this is true, the legislation of the past twenty-five years is responsible for it. Few of the people know anything of it. Fewer still of the legislators know anything of the subject. It became the duty of food commissioners and chemists to investigate and educate the others, but after six years *these* accept the ignorance and prejudice of the masses as a basis for their decision, continuing the absurdity.

But it is not true that the people as a whole believe cider vinegar to be the only good one. A very large minority, if not a majority, of our people are European, of the first and second generation, and cider vinegar is not used in Europe. There the standard article is the distilled vinegar, though in the wine districts wine which has not sufficient alcoholic strength to keep from souring becomes vinegar by natural process, and is used.

In Canada, where special interests have not obtained legislation from legislators ignorant of the subject and the different sorts stand upon their merits, the distilled vinegar sells for much higher prices and to a far greater extent. In short, this is the only country on the globe which has enacted an enormous mass of law upon a subject which needed no law at all, and enacted it of a character of which our legislatures and scientists should be ashamed.

What is the result of it all? Two-thirds of all the so-called cider vinegar on the market is mixed and "adulterated"; that is, mixed with distilled. It is sold as cider vinegar at much higher prices than "colored distilled" would be, and is not as good. Several different sorts of fermented vinegar of an amber color are being manufactured to compete with cider vinegar, and this trade is increasing. They are far inferior to the distilled and sell for more because of their color. The average quality of vinegar is retrograding under the interpretation and execution of the food laws, and, worst of all, crookedness in business is being fostered, misrepresentation is encouraged, and there seems to be a practical breakdown of the laws applicable to this commodity—because we have attempted to protect an article which can not and should not be protected.

A. P. CALLAHAN & COMPANY.

COLLEGE GIRLS NEGLECT PICKLES AND ECLAIRS.

Minneapolis, March 5.—"Girls no longer dine on chocolate eclairs or pickles, and although ice cream still is the most popular food, it does not take the place of meat and potatoes, by any means."

This is the statement of Miss Jessie Ladd, matron of a dormitory at the University of Minnesota, where about 500 young women of the institution obtain their noonday lunch.

According to Miss Ladd's report for the three months ending February 1, about 4,000 pounds of various meats were consumed by coeds.—*Chicago Evening Post*.

What the Other Fellow Thinks

The Bakers' Dozen.

Thirteen is the "bakers' dozen." The extra one, thrown in for good measure, is significant, says the *Northwestern Miller*. It indicates that from time immemorial the baker has been a generous fellow, always ready to do just a little more than the law demanded of him. No trade came in closer contact with the mass of people than that of the baker; none knew better the needs of the poor, the bitter struggle, and the dread pinch of hunger; and in sympathy and practical help, the baker was the first to respond, the "bakers' dozen" indicating his spirit.

It is true that we are told that Pharaoh hanged the chief baker, but it does not appear that it was because he made sour bread or otherwise misbehaved himself. Pharaoh was notoriously uncertain and hasty in his judgments, and it was probably merely a matter of luck that the chief butler escaped and the unfortunate baker, probably the better man of the two, was separated from his headpiece.

The baker has always been obliged to stand the brunt of the blame when things went wrong. During the French revolution, when the mob grew hungry, it stormed the bakeshops and looted the poor bakers' loaves. This was a perfectly unreasonable and illogical thing to do. The baker was not responsible for the scarcity and high price of bread. The wheat crop failed, flour was dear, and the baker, being the last link in the chain and in contact with the consumer, was obliged to charge what it cost him to make bread. Nevertheless the populace was hungry, and it took the easiest means at hand to get food, regardless of the baker's predicament.

To this day the public demands that the baker must furnish bread cheap, no matter how much his flour may cost him. Put up the price of the loaf and there follows an outcry against the baker—he is a robber because he is unable to make cheap bread from dear flour. The public never thinks further than the immediate object of its anger; it is like the dog that bites the stick, regardless of the hand that wields it. Nevertheless the baker deserves well of the public. He does the best he can to keep the world from going hungry. It is not his fault if the crops fail, flour is dear, bread is high. His dozen of thirteen shows his generous desire, but he cannot accomplish the impossible.

If wheat goes to the figure that some millers anticipate before a new crop comes, there will have to be a material advance in the price of bread. As usual, the baker will be held responsible for it by the unreasoning and unreasonable majority. No one likes to be accused unjustly, especially one who is naturally liberal minded. It might be a good idea for bakers' associations to begin now, before the exigency arrives, to educate the public as to the degree of responsibility which rightfully attaches to the baker when bread advances in price. Plain figures as to the relative shortage of the wheat crop and the actual cost of the materials and labor which enter into the making of a loaf of bread, if simply stated in a manner easily comprehended by the consumer, would go far to forestall adverse criticism, and possibly adverse action, should the price of flour advance very greatly and thus force an advance in the cost of bread to the public.

Enforcing Food Laws in New York.

It may be taken for granted that no inconsiderable degree of New York city's remarkable mortality record has been the result of active, persistent enforcement of laws and ordinances bearing on the sale and use of impure food. Considering the tremendous proportions and the congested conditions of its population, the city presents a showing of low death rate not equaled in similar circumstances anywhere in the world.

As suggested, a partial explanation for such conditions may be found in the course of the authorities in connection with provisions authorizing interference with the practice of selling impure food and the habit of consuming it.

The report of the city health department for twelve months is highly interesting, especially in connection with the expense to the tax payers of carrying the laws and ordinances into effect on a basis of persistence and efficiency—and the concrete results in the way of the amount of impure stuff destroyed.

During those months the health department inspectors destroyed 13,121,008 pounds of unfit fruits, vegetables, eggs, fish,

confectionery and groceries. Thus approximately more than 6,600 tons of such stuff was consigned to destruction.

All this enormous amount of the articles named was on the market, for sale. Had not the inspectors done their duty, it would have found its way to the tables of the men, women and children of the city—an almost unimaginable supply of disease-breeding, death-dealing poison.

During the same time 908,663 pounds of meat, poultry and game were condemned and destroyed—approximately 454 tons! The meat, poultry and game, too, were in the stalls, on the tables and at the doors of vendors, ready to be disposed of just the same as fresh and proper articles of food.

All these articles were in the nature of rank and fatal poisons. All were intended for consumption. But something like efficient enforcement of health regulations by the inspectors saved prospective purchasers and consumers from the terrible results of taking such food into the human system.

Credit, lasting and unspeakable, is due to the officials under whose management these results were accomplished. And there is no occasion to suggest that similar regulations, enforced in a similar manner, would produce similar results in every city in the land.—*Chicago Daily Journal*.

The Packers and the Law.

For three months the government has been examining witnesses, books and memoranda of the packers in an endeavor to prove them guilty of "conspiracy and restraint of trade."

We are neither the judge nor the jury nor do we hold a brief from the packers, and yet we hope the government has not proved its case, for the reason that these gentlemen are our fellow townsmen. Simple pride in Chicago and in its citizens compels us to say that we hope the government has not proved its case.

The present heads of the packing establishments here are all men of the second generation in this business. The elder Swift, Armour and Morris have died, and the younger men have succeeded to the business—its burdens, cares and responsibilities.

There has been much said in the pulpit and press about the "wayward life of the rich man's sons," but these young men—the Swifts, Ogden Armour and Edward Morris—though succeeding to large fortunes, have not fallen under this description. They are men of integrity and honor and great business capacity. In their private and individual life they are without reproach, and we earnestly hope that in their collective and corporation life they have maintained the same high standard that they have maintained as individuals.

It is said "corporations have no souls"; but they are managed by human beings, and it is human to err. It is quite possible that in the enormous aggregate of business that these great corporations have been transacting in the last ten years there have been mistakes made. But who has not made mistakes?

If the twelve "upright" and "honest" men on the jury should be put on trial for all their business and individual acts, how many of them would be adjudged as not having made any mistakes or transgressed any of the commercial laws?

We do not think in a case of such great importance as this that a pure technicality or breach of the mere letter of the law should warrant a verdict of guilty. The evidence should show conclusively that there was a conspiracy for the purpose of enhancing prices and restraining trade. If it does show that the packers willfully, deliberately and purposely agreed together to advance the price of their product to restrain trade and keep out competition, then a verdict of guilty should be rendered and the law enforced and punishment inflicted.

We are disposed to agree with Judge Kavanagh that "all of us have too much reverence for the old laws, which may have been all right at the time they were framed, but which do not apply to present day conditions."—*Chicago Evening Post*.

Economies in the Cost of Living.

As long as there exists competition, or even the free possibility of competition, it is extremely doubtful whether association of consumers can materially reduce the average prices at which goods are retailed. The one link in the chain which might be cut out would be the profit of the retailer, but it is probable that even this saving would be offset by the greater cost of amateur service over the cost of professional service. The trained grocer effects many petty economies that are overlooked by the inexperienced tyro, and these will add up to fully as large a sum as the difference between the expert's profits and the beginner's salary. This condition is borne out by the report now made, wherein it appears that the co-operative societies in England pay a dividend to their members of 9 per cent a year, but that their prices are no lower and

are sometimes higher than the prices set by privately managed concerns.

There is another phase of the subject, one that is too generally overlooked, and that may in the long run be found to be the most vital of all. The significant mention of the coincidence in English localities of co-operation's maximum activity and of the maximum poverty districts indicates a possible influence on habits of thrift that is ominous. It is not fashionable to take such influences into account nowadays, but the world will not always enjoy the wonderful era of plenty that the last half century has seen and may live to repent its present indifference to the teachings of experience.—*Detroit Free Press.*

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As a careful housewife you will look to the quality of the berries, but how about the quality of the custard or Blanc Mange? The entire success of these desserts depends upon the delicacy and purity of the corn starch. Kingsford's has meant supreme quality in corn starch for over sixty years. Yet women will accept inferior substitutes or low grade corn starches and pay the same price as for Kingsford's. You doubtless ask for Kingsford's, why not insist on getting it?



KINGSFORD'S PUDDING — 3 cups scalded milk, 6 level table-spoons Kingsford's Corn Starch, $\frac{1}{4}$ cup cold milk, $\frac{1}{3}$ cup sugar, $\frac{1}{4}$ teaspoonful salt, 2 eggs, 1 teaspoonful vanilla. Mix corn starch with cold milk. Stir the scalded milk into this mixture, return to double boiler and stir constantly till it thickens. Cook eight minutes. Beat the eggs slightly, add sugar and salt. Add to corn starch mixture and cook one minute longer. Take from fire and add vanilla. Serve cold with cream and sugar and berries. (Serve six persons.)

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Enforcement of State Food Laws

IV. The Need for Sanitary Legislation.

By H. R. Wright, Former Dairy and Food Commissioner of Iowa.

In one of his bulletins the Pure Food and Drug Inspector of Tennessee, whose numerous duties and responsibilities warrant his state in appropriating a good deal more money than is appropriated for the use of the department, recites the following: "It is obviously a much greater good to the community to compel bakers to keep their shops clean, to discharge diseased workmen, etc., than it is to stop the sale of buckwheat flour adulterated with wheat flour. It is far more important to know that a cow is free from tuberculosis than it is to know that a part of her shall not masquerade as canned chicken."

In direct contrast with this sentiment, to which all of us can and do agree, the state of North Dakota requires the commissioner of that state to list as real violations of the law packages of crackers that are properly labeled except that the required name and address of the maker is given only as "National Biscuit Company," and to note as misbranded a bottle of catsup the label of which alleges that benzoate of soda is present, when as a matter of fact the chemist could not find any benzoate in the catsup.

It will be remembered that the candy investigation made last summer in Pennsylvania, the most complete inspection of cheap candies ever undertaken, developed the fact that practically no adulteration of candy occurs. This same complete investigation, particularly directed at cheap candies, developed the fact that, when put before the purchaser, twenty-four per cent were "dirty," "horribly dirty" as the report relates.

The tables already published in this series and the explanation heretofore given have very clearly shown that, so far as official reports of completed prosecu-

tions or detected violations of food laws are concerned the food situation in this country is a thing on which we should congratulate ourselves. That is real, harmful adulterations are mighty scarce and the adulterations that affect our pocket books far outnumber those that might even remotely affect our health. I hold that the food commissioners of this country have actively enforced those laws which forbid adulterations of foods by means of additions of inferior ingredients or chemicals, and have successfully enforced those laws which require the labels to tell the truth about the identity of the contents under the label, but it is not out of place here to call attention to the fact that the sentiment of the commissioner of Tennessee quoted above is not the guiding star of very many of our food officials.

What do you mean when you use the expression Pure Food? Well, if you are a fool food faddist you probably mean that the food is free from benzoate of soda, alum, saccharin, salycilic acid; contains no arsenic or formaldehyde or boric acid, is put up in a properly sealed package and has the name and full address of the packer placed upon it in specially required type, and that the label also tells all the truth about the ingredients in the package. If you are one of these who make a living out of horrifying the public by printing fictitious lists of food adulterations, you will particularly require that this pure food of yours shall be free from your pet annoyance, whatever that may be and under whichever one of three or four names you know it best. But if you are just an ordinary, sensible citizen, not excited by the ballyhoo of chemists and others anxious to hold a job, and if you are thinking for yourself instead of swallowing

whole the undigested mental pabulum offered by the aforesaid faddist, you will probably conclude that in your case pure food ought to be clean, sound and wholesome, free from natural decay, free from dirt or filth of any kind. You might do some kicking if your buckwheat flour and your maple syrup are adulterated with cheaper ingredients, you might object seriously if your catsup and sweet pickles were preserved with benzoate of soda and sweetened with saccharin, but if your flour and your syrup and your catsup come to you contaminated with filth, you will absolutely refuse to have them at any price. You want pure food, not filthy food, of course.

Vast sums of money have been spent in this country in the enforcement of pure food laws, so called, and it is only within a very few years that any real efforts have been made to secure our foods in a clean, sanitary condition. Some of the states have really done a good deal in this direction. Some of the states have real sanitary laws that have teeth in them. More of them ought to have such laws and more of them will have such laws. There is a growing interest, not in the matters of adulterated foods, but in the matter of clean, pure foods, and this interest is not confined alone to the public but is greatly shared by the food commissioners of the country. Some of them realize that the day is gone by when they can make good with their public by prosecutions on baking powder labels, and by throwing fits about the adulterations with chemicals that do not occur. They see ahead of them a possible real service to the public, a service that will bring them the satisfaction of a duty well performed and also the applause of all the public, because all of us want clean foods, whether we say much about it or not.

In the table which is the basis of these articles, a large number of prosecutions are listed which are set down in the various reports only as "adulterated milk," "adulterated catsup," or even listed under the single word "illegal" or "adulterated." It is therefore impossible to make an accurate statement of all those cases in which some matter of uncleanness was a part of the reason for the prosecution. Doubtless a large number of milk cases have been made for reasons of uncleanness and which are not specified in the tables. So that at least the prosecutions made upon any sanitary grounds are surely larger than here given and this unavoidable source of error should not be forgotten.

Then it should be remembered that few states have specific sanitary laws in regard to anything except the sale of decomposed foods or the sale of the flesh of diseased animals, or of dirty milk, so that the prosecutions listed are only a few of those that are possible when proper laws are enacted and the powers and duties of the commissioner are closely defined, which is not now the case, except in a few instances.

The table given in the first article of this series lists as prosecutions finished under the head of unsanitary conditions of foods a total of 487 cases; sale of rotten eggs, 113 cases (see Pennsylvania below); sales of meat rotten or diseased, 171. Of this last number, 137 cases were made in New York for the sale of "bob veal," that is, veal less than four weeks old, and so deemed unwholesome. So that the number of cases of rotten or diseased meat is extremely small when it is remembered that meat forms an item of universal daily diet in this country.

Unsanitary conditions of foods have given rise to prosecutions as follows:

Wisconsin, 168 cases, about equally divided between sale of unwholesome or unsanitary dairy products, and cases of maintenance of unsanitary butter or cheese factories.

Indiana makes 149 prosecutions for dirty milk, filthy slaughter houses, unclean stores and dirty back yards. The authorities of this state make more prosecutions for the sale of dirty milk than they do for the sale of milk below standard, in great contrast with other states where numerous prosecutions are made for the sale of milk and cream below standard but none for the sale of unclean milk or cream. Under the sanitary law of Indiana nearly twice as many prosecutions are made as under all the rest of the food laws, the exact figures being 149 and 87, the latter number including 25 cases for the use of benzoate of soda and saccharin.

Pennsylvania gives 44 prosecutions as follows: 22 cases on sales of adulterated nuts, 15 cases on fish unfit for food and the rest miscellaneous. This state also makes 54 prosecutions for sale of eggs unfit for food and which number was omitted from the original table.

Tennessee makes 40 prosecutions for such offenses as "leaving screen doors open," "failing to provide proper fly screens," "failing to protect food," "dirty kitchen," "failure to remove refuse."

Iowa makes a couple of prosecutions for sale of unclean milk, one for unclean milk store, 13 for sale of meat product that was decomposed, and a half dozen for the sale of meat from the carcass of a diseased animal.

Utah makes only a few prosecutions, five in number, for sale of miscellaneous foods unfit for use, but condemns and destroys a very considerable quantity of meat, some diseased live hogs, and other foods found on sale and being either dirty or decayed.

North Dakota list as violations of the law four sales of catsup made of bad material, one decayed canned salmon, one cheese and one bologna sausage unfit for use as food.

Oregon condemned four insanitary dairies, Illinois finds some rotten currants and cereals containing vermin, and Massachusetts duplicates the Illinois record.

The importance of the cases here given is readily seen by a consideration of the nature of them. They include the sale of rotten eggs, rotten meat, wormy breakfast foods, decomposed nuts, old, sour, stale, rancid milk and cream, rotten fish, meats from animals suffering with disease. They include still another class of cases such as the maintenance of unclean cheese factories, dirty creameries, filthy dairy premises, and vile slaughter houses. Still another class of cases includes dirty groceries and restaurants, unscreened places where food is cooked or packed, foods not protected from flies and dirt.

The prosecutions here listed have been made in some instances upon meager authority given the commissioner, but they point the fact that every state ought to have laws for the inspection and control of all places where foods are manufactured or packed; for places such as restaurants and hotels where foods are cooked and served to the public; for the control of stores where foods are kept for sale and sold; for the prevention of the sale of foods that have deteriorated by reason of age or advancing decay. The demand for cheaper foods naturally stimulates the

use of inferior materials in food manufactories and this fact still further makes necessary the inspection of such places.

We have advanced a long way since the days when our remote ancestors thought it was good enough to sweep the refuse from the table to the rushes that covered the floor. We come now to the days when it is not good form to have a breeding place for flies at the back door of our homes, and we are rapidly approaching the time when our laws and our food officials will be mighty busy with all sanitary matters, when our foods will be prepared for us in a clean and hygienic manner whether they are put up a thousand miles away or at the store or bakery or restaurant just around the corner. We have probably passed the day of artificial stimulation of interest in food matters by solemn fictions of disasters to befall us by means of chemicalized foods, and we can now turn nearly the whole of the food force of the country to the problem of giving us pure foods. It may be that the state boards of health will have to take the place of the food commissioners before we can reach this desirable condition, but at any rate the public health demands, and the voice of the public more and more insists, that our laws and our officials shall insure cleanliness in foods.

ITINERARY OF THE CONVENTION TRAIN.

The following schedule for the "Pure Food Special" over the Chicago, Burlington & Quincy and Northern Pacific Railways, from Chicago to Seattle, has been announced:

- June 30th, leave Chicago 10:15 p. m., Burlington Route.
 - July 1st. Arrive St. Paul 10:45 a. m., Burlington Route.
 - July 1st, Leave St. Paul 11:00 a. m., Northern Pacific Railway.
 - July 2nd, Arrive Gardiner, Mont., 5:20 p. m., Northern Pacific Railway. Leave Gardiner by six-horse stage coach at 5:20 p. m. Arrive Mammoth Hot Springs Hotel 6:30 p. m. Dinner and lodging.
 - July 3rd, Leave Mammoth Hot Springs Hotel 8:00 a. m., after breakfast, arrive Norris at noon for lunch; leave Norris at 1:30 p. m., arrive Fountain Hotel, Lower Geyser Basin, at 5:30 p. m. Dinner and lodging.
 - July 4th, Leave Fountain Hotel at 8:30 a. m., after breakfast, for Midway and Upper Geyser Basins. Lunch, dinner and lodging at Old Faithful Inn.
 - July 5th, Leave Old Faithful Inn at 7:30 a. m., after breakfast, for West Arm of Yellowstone Lake. Lunch at Lake and leave for Colonial Hotel at Yellowstone Lake outlet at 1:00 p. m. Dinner and lodging at Colonial Hotel.
 - July 6th, Leave Colonial Hotel at 8:30 a. m., after breakfast, for Grand Canyon; arrive at Grand Canyon at 11:30 a. m. Lunch, dinner and lodging at Grand Canyon Hotel.
 - July 7th, Leave Grand Canyon Hotel at 8:15 a. m., after breakfast. Lunch at Norris. Arrive Mammoth Hot Springs Hotel at 3:30 p. m. Dinner. Leave Mammoth Hot Springs Hotel at 6:30 p. m.; arrive Gardiner 7:15 p. m. Leave Gardiner 7:15 p. m., Northern Pacific Railway.
 - July 9th, Arrive Seattle 8:30 a. m., Northern Pacific Railway.
- Members and others desiring to go direct, omitting the park tour, may take advantage of the fast, through service, as per schedule below:
- July 5th, Leave Chicago 10:15 p. m., Burlington Route.
 - July 6th, Arrive St. Paul 10:45 a. m., Burlington Route.
 - July 6th, Leave St. Paul 11:00 a. m., Northern Pacific Railway.
 - July 8th, Arrive Seattle 8:15 p. m., Northern Pacific Railway.

Commissioner A. H. Jones of Illinois, who has co-operated with the two railroads in arranging the itinerary, has made the following announcement to members of the Association of State and National Dairy and Food Department:

"Inasmuch as the majority of the members who will attend our Convention at Seattle will either start from or pass through Chicago, it occurred to the undersigned that it would be more pleasant for all concerned if they would rendezvous at Chicago and proceed thence in one organized party. This idea has been adopted, and to enable us to put the plan in effect the Burlington Route and Northern Pacific Railway

have placed at our disposal a special train for our exclusive use, to run through from Chicago to Seattle, with a side trip through Yellowstone National Park, in accordance with itinerary shown herein.

"In order to make this special train a complete success, it is earnestly hoped that all members contemplating this trip will arrange to be with us."

Circulars giving other information regarding the trip may be had by addressing Mr. A. J. Puhl, General Agent, Passenger Department, Burlington Route, 111 South Clark street, or Mr. C. A. Matthews, General Agent, Passenger Department, Northern Pacific Railway, 141 South Clark street, Chicago.

NATIONAL DAIRY SHOW ASSOCIATION.

At the recent annual meeting of the National Dairy Show Association the directors and officers whose terms had expired were re-elected. The Board of Directors was increased by the addition of Messrs. F. L. Ames, Massachusetts; J. R. Valentine, Pennsylvania; C. D. Ettinger, Illinois; John L. Smith, Washington; Robert Scoville, Connecticut, and Arthur G. Leonard, Chicago. The date for the Dairy Show was fixed for the period of October 24th to November 2d for this year's show and as a permanent period for all future expositions, and the International Amphitheater has been leased.

"For the purposes of extending out efficiency the association increased its capital stock and augmented its working machinery by the addition of new blood, as the directors, after reviewing the six successful shows held by this association, confidently believe that a still greater national show is needed and that its place and usefulness has been established beyond cavil by the results achieved by the expositions so far conducted by our association," said President Van Norman.

"Statistics go to show that the population of the United States has passed the point where our farm productions will maintain our own people and no matter how herculean the effort to re-establish our food products, that low prices for any character of farm production can not again be reached. Therefore, intelligent, well directed educational effort to produce more and better cattle upon the farms will serve the two-fold purpose of increasing earning directly from this source and from increased soil fertility, hence more and better crops.

"As the era of brain and brawn has superseded that of brawn alone, the most enlightened and intelligent methods must be presented to our people to bring the much needed results. We believe that our exposition, where the best animals produced by the highest attainments of the breeder's art are displayed for purposes of comparison, affords the seeker for information the best possible school, and where we assemble the modern in machinery for our purposes, giving our visitors under one roof an education in all of the arts—breeding, feeding and fitting and care and preparation of the products on latest lines of health and sanitation. Above all we aim to teach how to obtain the maximum of result in the minimum of cost, of time, money and labor and in so doing we believe we are undertaking a work worthy of the support of the people of this country.

"To accomplish this we have enlisted the services of Mr. W. E. Skinner, who is president of the International Live Stock Exposition, to take the management of our show. Mr. Skinner has an acquaintance with the live stock industry of this country which extends from coast to coast, having established the Stock Show at Fort Worth and placed the Western Stock Show at Denver on big national lines, and was one of the founders of the International at Chicago. He is essentially a show man, winning the confidence of exhibitors and public alike by adhering to the strictest lines of integrity in the intelligence and conduct of his work and we expect the most hearty co-operation will be extended to Mr. Skinner by those interested in the great dairy industry in all of its branches."

CHICAGO PURE FOOD REPORT.

Health Commissioner George B. Young of Chicago has made public figures of the work done by meat and food inspectors during the year 1911. In two of the largest branches of the work, meat and canned goods, more than 1,600 tons of material were condemned in the year ending Dec. 31, 1911. The report given out by Dr. Young includes fish and has a separate list of condemnations for the stock yards. While the amounts condemned there were large enough to make a considerable item as a separate column, they did not equal the condemnations outside the yards. The heaviest month for the yards was in September, when more than 80,000 pounds of meat were condemned.

Meat Inspection the Latest Political Kickball

By Our Staff Correspondent.

WASHINGTON, May 10, 1912.

Another made-to-order "scandal" has broken out in the Department of Agriculture. This time it is Dr. A. D. Melvin, a deacon in the Mt. Pleasant Congregational church, a man who refuses to write magazine stories because he says the government pays him for services that require all his energies, who is a target. So of course is Secretary Wilson and of course George P. McCabe, the author of the meat inspection statute. No "scandal" would be complete without McCabe.

On what the Rev. Mrs. Caroline or Charlotte Bartlett Crane, a former minister of the gospel, whose home is in Kalamazoo, Mich., told him, Representative Nelson of Wisconsin drew up a resolution preceded by fifteen whereases, which is the most asinine thing that has ever been offered to Congress. In the whereases he asserts that Wilson, McCabe and Melvin, in effect are guilty of murder, burglary, arson, mayhem and petit larceny in their maladministration and nullification of the meat inspection law. In the resolution he says, therefore, let us investigate to get the facts and all the information.

This "scandal" differs from any of its predecessors in that it was discovered by a coterie of the insurgent Republican members of the House and Senator LaFollette. They concocted it and the political benefit is to go to them—if the Democrat-controlled Moss committee will only provide for an investigation to run during the summer. By means of it they seek to discredit President Taft's administration of a law put on the books during the Roosevelt administration.

A hearing was begun on May 8th to determine whether the Moss committee shall recommend the adoption of the investigation resolution. Under pretense of finding whether there is a *prima facie* case requiring investigation, the committee on that day put Mrs. Crane on the stand. Now when a witness is put on the stand he is supposed to tell the truth, the whole truth and nothing but the truth.

Without reflecting on the lady in the case (she is not a lawyer and is not supposed to know) she did not give any testimony at all. She made a speech, very much like the speeches made in the Camorra trial in Italy, in which the lawyers, judges, prosecutors and jurors got up and raged against each other, hurling epithets, insinuations and statements of fact indiscriminately. Once or twice Judge Floyd of Arkansas, who, during the Wiley investigation, appeared to feel ashamed that such a travesty on law and decency was permitted to go on under his very eyes, endeavored to keep Mrs. Crane down to facts coming within her personal knowledge or of someone she knows. But the lady, being a lecturer, refused to be held down to statements of fact.

On the contrary, she admitted that she did not know any facts, but she had "impressions" and opinions. So she went on, all day and when the committee rose it was accompanied with the announcement that she would be on the stand the next day.

One of the first manifestations of insubordination on the part of the Bureau of Chemistry was a demonstration made behind the skirts of a woman employe of that bureau. She was told to have letter heads printed showing the Board of Food and Drug Inspection to be a body subordinate to Dr. Wiley, the chief of that bureau. The bureau was determined to have the stationery printed in that way and it required an order from Secretary Wilson to keep Wiley's assistants from doing as they instructed the woman. She appeared to have been put forward to do that work.

It is not yet anything more than an impression that this is a parallel case and that when the time comes it will appear that Dr. Wiley or some of his faction is again taking refuge behind the skirts of a woman, who, like too many other women, takes the position that because she thinks the law is not being enforced, the fact is that it is not being enforced. Dr. Wiley and Mrs. Crane have made speeches together, one of their performances of that character being given in the church of which Dr. Melvin is a deacon. The pastor of that church is a comparative newcomer in Washington and does not know much, if anything, about the factional row in the Department of Agriculture started when Dr. Wiley felt aggrieved because he was not permitted to be the judge, jury

and prosecutor in all the cases arising under the food and drugs act. Another reason for thinking the former chief is still engaged in fighting his former chief, but is remaining in the background, is that the monthly magazine in which he is doing his uplift work had an account of the "scandal" about to break in the meat inspection service in which some of the phrases used in Nelson's fiery preamble are to be found.

This "scandal," like the Everglade scandal, was carefully framed up. The primary purpose was to have another "scandal" running at Washington during the dull summer months.

It was impossible to say at the time this article was written whether the Moss committee or the House would "fall" for the program. Moss and other members of the committee, whose constituents have been informed as to the kind of work they have been doing and the character of the interests back of the holier-than-thou campaign (notably the straight whisky people, so-called) manifested a desire to make haste slowly. They were helped in that desire, too, by the presence of S. H. Cowan, attorney for the cattle raisers of the southwest, representatives of the National Live Stock Association and the Association of Cattle Feeders, every one of whom will be damaged financially if the radical ideas of Mrs. Crane are permitted to be forced upon the meat inspection service by the shrieks intended to give the people of the country the impression that they are being given diseased meat because the veterinarians, scientists and plain doctors who drafted the meat inspection regulations could not come to the conclusions reached by Mrs. Crane, who is neither a doctor, nor a lawyer, nor a veterinarian.

On the eve of the Moss committee meeting to consider the resolution, Secretary Wilson got out a ten page pamphlet in which he said the statements in the fifteen whereases are "for the most part, either absolutely false or are mixtures of half truths with falsehoods skillfully blended, producing a semblance of truth and creating erroneous impressions."

"The charges are all old and have been investigated and found without truth either by the Department of Agriculture or by the American Public Health Association," and, according to the pamphlet, "are drawn in the main from Mrs. Crane and from a book written by Dr. Albert Leffingwell, whose book on American meat inspection was published in England and appears to be a skillfully drawn appeal to English workmen not to eat American meat."

The secretary raised the question as to who has been paying the expenses of Mrs. Crane and who financed the publication of Dr. Leffingwell's book. He is so accustomed to uncovering some interest that is trying to smother some other interest, in every charge or insinuation that is made against his department or any subordinate in it, that he just naturally wants to know who is paying for the work.

"This is absolutely false," says the secretary with regard to a charge that he and Dr. Melvin, by means of regulations and other means, have specifically authorized the nullification of both the letter and the spirit of the meat inspection law, written by McCabe and introduced by Albert Jeremiah Beveridge.

"This is false," is his answer that because of these nullifications the stamp "U. S. inspected and passed" cannot be accepted as a guarantee that the "meat is sound, healthful, wholesome and fit for human food."

"This is an unpardonable misstatement of fact" is the way the secretary deals with a "whereas" that says the health standards for animals are so low that the unquestioned improvements in packing house sanitation are insignificant, and an attempt to discredit Prof. William H. Welch, professor of pathology in Johns Hopkins University; L. Hektoen, professor of pathology in the University of Chicago; Joseph Hughes, president of the Chicago Veterinary College; V. A. Moore, professor of comparative pathology in Cornell University; Leonard Pearson, dean of the veterinary department of the University of Pennsylvania; M. J. Rosenau, director of the hygienic laboratory of the United States Public Health and Marine Hospital Service, and Ch. Wardell Stiles of the same service, who made up a commission that drew up the standards by which cattle are judged as fit or unfit for food.

Secretary Wilson becomes indignant over that attempt and asks:

"Has it come to pass where the opinions of men who are acknowledged by the world as honest, able scientists and who have devoted their lives to the study of a particular subject are to be discredited by the charges of paid agitators and writers for reward?"

Boiled down to its essence, Mrs. Crane's speech the first day amounted to this: She does not know of a single instance where a bit of meat unfit for consumption has ever gone out bearing the stamp "U. S. inspected and passed," but she can see how, were the packers anxious to put out diseased meat, they could beat the regulations; that she has no personal knowledge of any fact except that in the ante mortem examination, which she said in one place is for the benefit of the packers and in another that it is farcical, inspectors do not get down and feel every animal to see whether it has lumpy jaw; that she has reasons for believing that the effect of the regulations and announcements given out for the benefit of men in the meat inspection service result in the nullification of the law, and finally that what Dr. Melvin has written in his annual reports constitutes the finest sort of a brief for the packers.

Nelson, the putative author of the resolution, however, is the individual to whom should have been awarded the degree of long ears. Remembering the ease with which Wiley put things over on the Moss committee because Secretary Wilson was denied the privilege of being represented at that hearing by counsel, he demanded, before he made his speech in justification of his whereases, that the committee give him assurances that he would be allowed to conduct the investigation as he saw fit; that the committee grant him the right in advance to put any question he thought proper, to any witness, and to be allowed to put on at least fifteen witnesses in any order that pleased him. That proposal to allow him to put in what he wanted and in the way he wanted it aroused the ire of Moss and Judge Floyd. The latter is the only member of the committee that has shown any appreciation of the control the committee should exercise over its investigations or any appreciation of the fact that witnesses should be cross-examined so their hearts will be laid bare. Floyd bristled up and declared that the committee could not let Nelson, Champ Clark, Majority Leader Underwood say how it should do its work.

Nelson threatened to appeal from the Moss committee to the committee on rules, but he thought better of that and went on with a laughter-provoking attempt to back up the lurid whereases. He was indignant that Secretary Wilson, in advance of any testimony, should denounce the statements made in the whereases as false, wholly ignoring the fact that Wilson knew the American Public Health Association three years ago deemed the assertions or charges, whatever he chooses to call them, unworthy of investigation, and that certainly the secretary is in a position to say whether what is said about his work is true or false.

There is one fact in connection with this "scandal" that is worth commenting upon. It is that none of the press association reports went out of Washington written on the assumption that the "scandal" had already been proved, as was the case in the everglade matter. For once in his life the secretary realized that, in these latter days, it is incumbent upon himself to make a defense in the same style and manner used by the interests that have been trying, ever since Wiley was not permitted to run at large allowing food interests approved by him to live and throttling those he did not approve, to force him out of the cabinet.

The result of that is that instead of a one-sided story being sent out to blacken Dr. Melvin (the damage has already been done to McCabe), the chief of the meat inspection service is getting his side of the case before the public along with the denunciation.

INTERNATIONAL DAIRY SHOW ASSOCIATION.

At the annual meeting of the International Dairy Show Association held in Milwaukee, April 18, 1912, the following officers were elected for the ensuing year:

President, Henry C. Schoellkopf.
First vice president, John Le Feber.
Second vice president, A. C. Reitbrock.
Third vice president, J. C. Hickcox.
Secretary, H. W. Clafin.

At this meeting the following dates were selected upon on which to hold the show: October 22nd to 31st, 1912. The show will be held in Milwaukee.

As the 1911 show was most successful from every point of view, it has given the management encouragement to enlarge

the different departments to their fullest capacity. The educational department will be one of the big features of the show, and will be worked out to the minutest detail. There will be lectures each day pertaining to the different dairy subjects by people of national repute, and assisted by actual demonstrations. Lectures will be given on the judging of the dairy cow and the care and handling of milk; on the by-products that are also manufactured from milk. The working creamery will be another feature of the educational department, whereby visitors will see butter manufactured in its most improved and sanitary ways. The exhibit of cheese and butter of last year was one of the largest in the country. The prospects are at the present time nearly double the entries that will be received this year in this department.

The cattle department will be enlarged to accommodate double its capacity of the present time, and the reputation made last year will not only be sustained, but will be improved upon in every possible way, and make for it an actual home for the cow. Wisconsin being the largest dairy state in the union, and Milwaukee centrally located, will draw its attendance from the remotest parts of the country, thereby making a place where it is both pleasant and profitable to make their exhibits.

The ventilating system has been installed whereby the air is being constantly changed, making the auditorium in which this show will be held one of the best ventilated buildings in the country, and there are all prospects of this being the most successful show ever held in this city.

OLIVE OIL AND COTTONSEED OIL.

Reports received by the Spanish Agricultural Department give the total production of olives for the Kingdom at 17,398,694 metric quintals (3,835,816,500 pounds), and it is estimated that the total production of oil for 1912 will aggregate 2,066,655 metric quintals (455,584,900 pounds). This crop was produced on an area containing approximately 1,435,177 hectares (3,546,515 acres).

The eight Andalusian provinces, with Seville and Cordova leading, produce nearly 61.39 per cent of the entire olive oil output of Spain. The production of oil for 1912 in a number of important provinces is given as follows: Malaga, 5,511,500 pounds; Jaen, 3,968,280 pounds; Lerida, 3,130,532 pounds; Valencia, 2,935,050 pounds; Tarragona, 2,380,968 pounds.

Consul General James A. Smith, of Genoa, Italy, reports that, according to figures furnished by the Ministry of Agriculture, the production of olive oil in Italy was 67,601,230 gallons in the season of 1909-10, 37,142,372 gallons in 1910-11, and 65,170,862 gallons in 1911-12. Dealers usually make their estimates of oil production upon a uniform average of 20 per cent of oil to the weight of the olives, but the percentage of oil produced during the last three years actually works out at 16.73 per cent in 1909-10, 15.03 per cent in 1910-11, and 17.5 per cent in 1911-12.

Consul General W. Stanley Hollis of Beirut, Syria, reports that low prices resulting from the large and good crops of olives gathered during the last harvesting have diminished the consumption of cottonseed oil from Egypt and the United States. Prospects for the coming crops of Beirut and Lebanon olives are also assuring, though two successive years of excellent crops are practically unknown.

On the other hand, imports of cottonseed oil into the Stavanger consular district of Norway have been growing from year to year, largely due to the increasing use of this oil in the oleomargarine factories of the district.

While the 1911 statistics for the entire district and for the Kingdom are not yet available, the imports for the city of Stavanger last year show, in contrast to a loss of 56,933 pounds in olive oil, a gain of 500,905 pounds in "all other oils," most of which was cottonseed.

THE COST OF HIGH LIVING.

While the cost of living is a problem of increasing perplexity the world over, it is not always remembered that the ease upon which this age insists is a factor in the result. Even the added cost of having every necessity of life brought to the door as a matter of daily routine or hurried to the home on telephone request is of itself considerable. Generally speaking, the householder now pays scores of people for services which his forbears performed for themselves; and so it is not only the high cost of living nowadays and the cost of high living which makes the world feel poor, but living is more than offset by a corresponding higher income, large enough to bring such results to three million people.—*American Grocer*.

The Law and the Food Manufacturer

Decision on Sale of Package Goods Under Net Weight Ordinances of New York City.

A case of much importance to both manufacturers and retailers has been tried in New York City. It relates to the sale of goods, in packages, cans or jars, for food consumption. It originated in a complaint made by the New York City Bureau of Weights and Measures against a provision dealer. This action finally came before the Appellate Division of the Supreme Court, and it was decided by a majority of the judges that branded package goods may be sold provided that such articles are sold without representation of weight or measure.

We append the prevailing opinion, written by Justice Ingraham, and the dissenting opinion of Justice Scott.

OPINION OF JUSTICE INGRAHAM.

The defendant was in business in the City of New York, engaged in selling provisions. On June 23, 1910, an inspector in the Department of Weights and Measures called at the defendant's place of business and asked for a pound jar of bacon. The defendant said he did not sell it by the pound but by the jar and then handed the inspector a jar for which the inspector paid the defendant thirty cents. After this testimony and the introduction of an ordinance of the City of New York the parties rested and the plaintiff asked for a judgment against the defendant for \$10 as a penalty for a violation of this ordinance. The Municipal Court gave judgment for the defendant which was affirmed by the Appellate term, and from that judgment the plaintiff appeals.

This jar of bacon sold by the defendant was in a sealed jar labeled "Beechnut Bacon" and was not put up by the defendant. He sold it as an ordinary article of commerce put up by the manufacturer. There was no weight upon the jar and the defendant expressly refused to sell it by weight. This is a well-known brand of bacon sold all over the city in sealed jars. The defendant handed the jar to the witness and the witness gave him thirty cents for it.

I think the court can take judicial notice of the fact that many kinds of fruits, vegetables, fish, meats and other provisions are preserved in sealed jars or cans and sold as food by the jar or can and not by weight.

Provisions of this kind have become an important element in the food supply of large cities and it would be destructive of the food value of these articles if the jars or cans had to be opened and the contents weighed before they were sold. It certainly would require a most specific prohibition in a statute or ordinance to prohibit sales of food and provisions in such sealed jars without opening the jars and removing and weighing the contents.

This ordinance is highly penal. Its clear intent is to prevent the public from being defrauded by false weights and measures and the ordinance itself should be strictly enforced where a sale is made in violation of its express provisions or methods adopted which would tend to defeat the objects for which the ordinance was passed. But certainly a construction should not be given to such an ordinance by implication which would prevent the public from purchasing provisions or food protected from infection or contamination in jars or cans of this character. There is not the slightest evidence that this jar did not contain a valuable food product in ordinary use and that there was any false weight or measure in the sale of the article in question. The charge against the defendant is that he refused to sell the product by weight but was willing to allow the customer to take the jar on payment of thirty cents, and this is claimed to be in violation of this ordinance.

As before stated this is a highly penal ordinance and it must be construed strictly and not extended by implication. The rule is thus stated in 13 Am. and Eng. Enc. of Law, 2nd Ed., 55: "It is well established as a general rule of law that statutes which are penal in their nature are to be strictly construed, and questions of doubt are to be resolved favorably to the accused," and this has been the universally applied rule in this State. (Jones vs. Estes, 2 Johnson 359; Bell vs. Dole, 11 Johnson 173; Health Dept. vs. Knoll, 70 N. Y. 530). In the latter case it is thus stated: "The rule is well settled in accordance with the general rule of construction of penal statutes, that a penalty cannot be raised by implication, but must be expressly created and imposed."

The ordinance in question is Section 388 contained in

Chapter 8 of the Code of Ordinances of the City of New York, entitled "Weights and Measures." Section 380 provides for a Bureau of Weights and Measures in charge of a Commissioner of Weights and Measures to be appointed by the Mayor. By Section 383 it is provided that all persons using weights and measures or any other instrument used in weighing or measuring any article intended to be purchased or sold shall cause the same to be tested, sealed and marked by the Commissioner of Weights and Measures. Subsequent sections contain specific provisions for ascertaining the correctness of any weights or measures used in the City of New York.

The section under which this action was brought contains a provision that no person shall sell or offer for sale in any market, public street or other places in the City of New York any fruit, vegetables or berries in crates, baskets or other measures or any butter in prints or any ice or coal or other fuel at or for a greater weight or measure than the true measure thereof. There is here a specific prohibition against selling any of these articles "at or for a greater weight or measure than the true measure or weight thereof." This sentence is clearly intended to prevent a purchaser being defrauded by the false weights or measures when the article is sold by weight or measure and is to carry out the general object of the chapter in question. The next clause of the ordinance provides "And all ice, coal, coke, meats, poultry and provisions (except vegetables sold by head or bunch) of every kind, sold in the streets or elsewhere in the City of New York, shall be weighed or measured by scales, measures or balances, or in measures duly tested and stamped by the Inspector or Deputy Inspector of Weights and Measures." There is here no express provision prohibiting food or provisions being sold by the piece or jar, and referring back to the language used in the beginning of the section as intending to enforce the same provision, it seems to me clear that the intent was to secure the proper weights or measures for use in the sale of provisions or other articles mentioned. The language of the section is that these specific articles sold in the streets, or elsewhere in the City of New York, shall be weighed or measured by scales, measures or balances or in measures duly tested or stamped by the inspector or deputy inspector of weights and measures.

There is certainly no express prohibition against a sale in these jars or cans of articles of food which do not purport to have been weighed or measured, but which are sold as put up by the manufacturers or canners. It is only by implication that this provision can be extended to actually prohibit sales of any articles of food only after they had been weighed by the seller, and as we have seen a penal statute cannot be extended by implication. The further provision that poultry may be offered for sale and sold in other manner than by weight cannot be construed as implying a prohibition against all other articles of food or provision being sold except by weight.

To import into this section such a prohibition is clearly a prohibition by implication which is not allowed.

I think, therefore, this determination was right and should be affirmed with costs.

DISSENTING OPINION OF JUSTICE SCOTT.

The action is brought to recover a penalty for a violation of an Ordinance of the City of New York.

The complaint is based upon the admitted fact that on June 23, 1910, at his place of business in the City of New York, the defendant sold to one Morgan a quantity of bacon in a glass jar and without weighing it. The evidence showed that the witness Morgan, an Inspector of the Department of Weights and Measures, asked defendant for a pound jar of bacon; that defendant replied that he did not sell bacon by weight; thereupon Morgan purchased and paid for a jar of bacon which was not weighed and the weight of which was not stated or ascertained in any way. The respondent expressly states that he does not claim that the ordinance is unconstitutional, or that it is not a valid exercise of the police power. (Tiedmann's Limitations of Police Power, 89. Am. and Eng. Enc. of Law, pp. 454-5-462 and cases cited.) The whole controversy thus turns upon the construction and effect of the ordinance.

The respondent's argument is, and this view seems to have

prevailed thus far, that the ordinance is inappropriate to and could not have been intended to apply to articles of food and provisions sold in jars, cans and other containers, but must be limited to goods sold by weight, so that its true meaning is that ice, coal, coke, meats, poultry and provisions, if sold by weight, shall be weighed or measured by duly tested and stamped scales, measures and balances.

If the ordinance can be justified at all it must be because its enactment is deemed to lie within the police power of the state, upon which ground similar provisions of law, providing that certain household commodities of general use may be sold only by weight, have been upheld in this country and in England for very many years. The subject becomes a proper one for the exercise of the police power because it affects the general welfare of the public, and the only apparent purpose for enacting such an ordinance is to protect the ignorant and unwary purchaser against the frauds and contrivances of the seller, to the end that each buyer of household provisions may have some assurance of getting what he or she buys.

If the ordinance be construed as respondent seeks to construe it, an easy path for its evasion is clearly indicated, and the whole purpose of the ordinance will be defeated.

In my opinion it should not be so construed, and cannot be without reading into it words which do not appear.

The ordinance first provides that fruits, vegetables or berries in crates, baskets or measures, or butter in prints, or ice, coal or other fuel shall not be sold at or for a greater weight or measure than the true measure thereof. So far the ordinance is directed solely against selling by false weight or measure. The next clause, and the one under which this action has arisen, goes further, and, as I read it, prohibits the sale of certain articles otherwise than by weight. The language is that all ice, coal, coke, meats, poultry and provisions (except vegetables sold by the head or bunch) of every kind sold in the streets or elsewhere in the City of New York shall be weighed or measured by scales, measures or balances, or in measures duly tested and stamped by the Inspectors or Deputy Inspectors of Weights and Measures." Here, as it seems to me, are two distinct mandates, equally definite and positive. First the commodities mentioned must be weighed and measured, and secondly, the weighing and measuring must be by scales, measures and balances duly tested and stamped.

One provision is no more mandatory than the other, and if we may say that, unless the buyer insists, the specified commodities need not be weighed, we may equally well say that, unless the buyer objects, untested scales, measures and balances may be used. No one, I apprehend, would contend for this latter reading. That the ordinance was designed to compel the weighing of the specified commodities, and to forbid their sales otherwise than by weight seems to be clearly indicated by the exception in favor of poultry. That alone of the specified commodities may be offered for sale and sold otherwise than by weight, and must be weighed only if the purchaser so desires. This extends to the sale of poultry alone, and enacts in precise language the provision which the respondent seeks to apply by construction to the whole prohibition. It seems to me to be perfectly clear that if the framers of the ordinance had intended to provide that all the enumerated commodities might, with the purchaser's acquiescence, be sold otherwise than by weight, they would have found no difficulty in so expressing themselves, and would have had no occasion to insert the special exception in respect to the sale of poultry. It seems to me to be entirely clear that the defendant violated the ordinance in selling the bacon in the manner in which he did sell it.

With the inconvenience which may result from the enforcement of the ordinances we have nothing to do, but it will probably be much less than respondent anticipates.

The determination of the Appellate Term and the judgment of the Municipal Court should be reversed and a new trial granted, with costs in all courts to appellant to abide the event.

Important Decision on Milk Chocolate.

Chocolate manufacturers won an important jury decision in New York recently in securing a verdict of acquittal on a charge that putting four or five per cent of wheat flour in milk chocolate constituted a violation of the pure food law.

The case was that of the United States against D. Auerbach & Sons of that city, large manufacturing confectioners. The goods in question had been sold and shipped by this firm to the C. T. Clough Mercantile Company of Colorado Springs.

The Government contended, and brought various chemists and prominent manufacturers in the trade to show, that milk chocolate bars should contain nothing other than milk, chocolate and sugar, whereas it was claimed that the defendant's product contained between four and five per cent of wheat flour.

The court instructed the jury that if the product was either adulterated or misbranded, either as a food or a confection, it could find for violation in either respect or in both. After an hour's absence, however, the jury returned a verdict for the defense.

Following is the charge of Judge George C. Holt, of the United States District Court for the Southern District of New York, before whom the case was tried, to the jury:

CHARGE OF JUDGE HOLT.

Gentlemen, the charge in the information in this case is that the defendant shipped in interstate commerce on the 25th day of February, 1911, from the city of New York to the city of Colorado Springs, consigned to the J. T. Clough Mercantile Company, a certain article, being and purporting to be an article of food and an article used for food by man, to-wit, milk chocolate, in a package containing the label "Auerbach Red Band Brand Sweet Milk Chocolate, warranted to be a pure and delicious confection," which said article shipped as aforesaid was adulterated in that a certain substance, to-wit, wheat starch, has been substituted wholly or in part for the article. And it is further alleged that the article was adulterated, in that the aforesaid substance, wheat starch, has been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength.

Now the section of the pure food act under which this information is brought provides that for the purposes of the act an article shall be deemed to be adulterated, first, in the case of drugs:

Then follows a description of what is adulteration in the case of drugs.

Then in the case of confectionery:

"If it contains terra alba, barytes, talc, chrome yellow or other mineral substance or poisonous color or flavor, or other ingredient deleterious or detrimental to health, or any vinous, malt or spirituous liquor or compound or narcotic drug."

If any confectionery contains any of those articles, it is adulterated, and the act does not provide that the introduction of anything else shall constitute the adulteration of confectionery.

Now the defendant claims that this is a confectionery, and it is so described on the outside of the package. It is also described as a food. Now, it is for you to say, gentlemen, in the first place, whether it is a food or a confection, or both. I do not understand that there is any claim that there is any evidence in this case that they violated the provisions of the pure food law in relation to confectionery.

Confectionery, of course, often contains a great many complicated combinations of different substances, and Congress has not undertaken to say that it shall not consist of combinations, but it says it shall not contain any of these things mentioned in the act. This milk chocolate does not contain any of such things. Therefore if this is a confection, in your opinion, I charge that you should acquit the defendant, unless you also hold that it is a food, and violates some food provision of the act.

Now, the act says in the case of food:

"First: If any substance has been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength."

It is urged that in this case, that wheat starch had been packed with it so as to reduce its strength and injuriously affect its quality or strength.

"Second: If any substance has been substituted wholly or in part for the article."

The Government alleges that wheat starch has been substituted for the article.

Now, the act in the case of food generally applies, or some part of it at least applies, to a single substance of food such as flour or meat, or some original, simple article, but there are a great many things which constitute food, which are compounds, and the act makes provisions in regard to that, and it says, "An article of food which does not contain any added poisonous or other added deleterious ingredients"—and that is conceded in this case of milk chocolate—shall not be deemed to be adulterated in the following cases:

First, in the case of mixtures or compounds which may be now or from time to time hereafter may be known as articles of food under their own distinctive name which shall not be an imitation of or offered for sale under the distinctive

name of another article, and the act provides that the name be accompanied on the same label or brand with a statement of the place where said article has been manufactured or produced.

Now, this article contains a statement that it is manufactured by Auerbach & Company of New York City, which complies with that provision.

Now, this article is sold as milk chocolate, which indicates upon its face that it is a compound or mixture. There is no such thing as milk chocolate as a natural single substance. There is chocolate and there is milk, and there is combined in this, therefore, something that makes milk chocolate. And if, in your opinion, this article comes within this provision relating to mixtures or compounds and is to be regarded as an article of food, and is an article which does not contain any added poisonous or deleterious ingredients, and is known under its own distinctive name, and is not an imitation of or offered for sale under the distinctive name of another article, and the name and the place of manufacture is on the brand, then you should acquit the defendant.

So that the question comes down to this, whether milk chocolate commercially means something which does not contain any wheat starch. It is admitted that the insertion of starch does not make it unwholesome. The defendant claims that he put in the wheat starch at a time before there was any action by the Government objecting to it; that it was authorized by formulas for the manufacture of milk chocolate before the pure food law was adopted, and that the reason why he put it in was so as to give it greater consistency, so it would be a better commercial article, particularly for warm climates.

Now this, as I say, is a compound. There is milk in it and there is cocoa—a buttery chocolate material. There is powdered sugar—300 pounds of powdered sugar in the formula used—more sugar than all the other materials put together. But the Government does not complain that they do not put outside the package that there is sugar in it. The complaint is, that they do not put outside the package that there is wheat starch in it. Now, that milk chocolate in the ordinary commercial sense includes all those things, that is a term which may be used, but if it does not include them—if, to the ordinary person, milk chocolate cannot be properly made and is not properly made with wheat starch inserted in it—then the act of the defendant is not protected by this provision of the act with regard to compounds. Now, that is a question for you, gentlemen. In the first place, was it a confection? If milk chocolate is a confection, and it is not a food, you should acquit.

In the second place, is it a food? And, if it is a food, has a substance been mixed with it so as to reduce or lower or injuriously affect its quality or strength, or has a substance been substituted wholly or in part for the article? Now, it is for you to say, in the first place, whether that provision of the act applies to such a compound as this. If they simply were selling a pure original article, like chocolate, or like sugar, and then there was mixed with it wheat flour, why, the act would undoubtedly apply.

But it seems to me that this article we are dealing with is a compound called milk chocolate, and the only question in the case is whether this is a milk chocolate; whether it is permissible in the ordinary meaning of the trade term to make milk chocolate by putting in such a proportion of wheat flour as may in the opinion of the manufacturer improve it as an article of commerce without essentially affecting or injuring it as milk chocolate.

Internal Revenue Ruling on Moisture in Butter Held Void.

J. W. Yerkes, at that time Commissioner of Internal Revenue, ruled in 1903 that 16 per cent of moisture in butter was adulteration and 11,150 pounds of butter of the Milton Dairy Company of St. Paul, Minn., were seized under his ruling. The dairy company won in the Federal Court at St. Paul and the Government appealed. The United States Circuit Court of Appeals in St. Louis on April 7th sustained the lower court's decision.

Judge Sanborn of the United States Circuit Court of Appeals leaves nothing to be inferred in his decision. He makes a plain statement of his view of the cases when he says:

"The Secretary of the Treasury has no authority, either express or implied, to fix or define by a general regulation the term 'abnormal quantities of water, milk or cream' in butter or the term 'adulterated butter' in the act of May 9, 1902, and his rule to that effect is void."

The moisture regulation has thus received another power-

ful blow and its only chance for salvation now is in the United States Supreme Court, to which appeal will probably be taken by the Government.

This case is familiar to the creamery and butter interests and involves 11,150 pounds of butter belonging to the Milton Dairy Company of St. Paul, which was seized by internal revenue officers on the claim that it contained excess moisture. The company paid the fine and then brought suit to contest the right of the Government to confiscate the butter claimed to contain 16 per cent or more of moisture. Judge Willard in his decision held that the Secretary of the Treasury and others to whom power was delegated had no authority to make this arbitrary ruling as to moisture content, thus putting in the law more than Congress had placed there. The part of Judge Willard's decision covering this point will be interesting to review at this time.

After quoting freely from the law of 1902, the judge said:

"Most of the sections referred to from the oleomargarine act deal with penalties for selling or receiving or removing the product without compliance with law as to stamping, branding, markings, etc. Section 14 provides for the employment of chemists and microscopists by the commissioner to aid him in his duties and that he shall be authorized to decide what substances, extracts, mixtures or compounds which may be submitted for his inspection in contested cases are to be taxed under this act; and provides that his determination in matters of taxation 'under this act shall be final.' Section 20 provides 'that the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may make all needful regulations for carrying into effect this act.'

"In addition to these provisions found in the act itself there are certain other provisions in the general law which bear upon the subject. They are found in sections 161, 251 and 3447, revised statutes. Section 251 is peculiarly in point, inasmuch as that authorizes the Secretary of the Interior 'to make rules and regulations, not inconsistent with law, to be used under and in the enforcement of the various provisions of the internal revenue laws.' In view of these provisions of law the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, promulgated a regulation that butter containing 16 per cent or more of water, milk or cream should be classified as adulterated butter under the act. Looking to the character of duties imposed upon the Commissioner of Internal Revenue, and the various provisions of law authorizing the promulgation of regulations for carrying out the plain purpose of the law, we entertain no serious doubt that this regulation was authorized. The contention that the delegation of authority to promulgate such a regulation is to delegate either legislation or judicial power to an executive office, is founded upon a misapprehension of the character of the authority delegated. That Congress can not delegate legislative authority or power to any executive official or board of officials is elementary. To do so would be destructive of our whole system and scheme of government. That the delegation of authority to add to or take from a law would be to delegate legislative power must also be conceded. But that Congress may enact a law and delegate the power of finding some fact or state of things upon which the operation of the law is made to depend is equally clear. The authority to make all needful regulations, not inconsistent with law, is not a delegation of power to add something to an incomplete law nor a grant of judicial power. It is only an authority to determine the fact upon which the operation of the law is made to depend. Congress might have made the necessary tests and might have acquired the knowledge of the buttermaking art to enable it to have enacted that adulterated butter should consist of butter having a moisture content of 16 per cent or more. But that would have been an unnecessary detail, for it was altogether competent to declare that butter which contained an abnormal quantity of water, milk or cream should be classified as adulterated butter, and that the fact as to what was, in dairy butter, an abnormal proportion of water, milk or cream should be determined by a regulation of the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury."

Rules Governing New York's Cold Storage Law.

Dr. Eugene H. Porter, New York State Commissioner of Health, has issued rules and regulations governing cold storage and refrigerating warehouses, in accordance with the cold storage law which was approved on June 15th of last year. These rules are to be regarded as temporary only, and as occasion requires the commissioner will amend, alter

and supplement them. Due notice of such alteration will be given to all persons interested.

Dr. Porter's regulations follow:

1. For the purpose of enforcing this act the term "cold storage" will be held to mean the storage of foods at or below a temperature of forty degrees Fahrenheit in establishments employing refrigerating machinery or ice.

The term "cold storage warehouse or refrigerating warehouse" will be held to mean an establishment employing refrigerating machinery or ice for the purpose of refrigeration in which foods are stored at a temperature of forty degrees Fahrenheit or below.

2. Articles of food intended for cold storage shall, when they are offered for or placed in storage, be enclosed in boxes, barrels, crates or other packages sufficiently strong to protect them from injury, unless the articles are of such a character that it is impracticable to pack them in containers.

3. When articles of food contained in packages are placed in cold storage, each package shall be legally marked in black or purple waterproof ink as follows: The name of the storage company and place in which it is located; below that the words "cold storage"; below that the word "received," followed by the day, month and year when said articles were placed in storage.

The word "delivered," followed by the day, month and year when such articles are taken from storage, shall be stamped upon such foods or packages before being removed therefrom.

When articles of food not contained in packages are placed in cold storage each individual article must be marked in the above manner.

All letters or figures must be in plain type not less than three-eighths of an inch in height.

The word "received" may be written "rec'd." and the word "delivered" may be written "del'd." and figures separated by hyphens may be used to indicate dates and will be regarded as sufficient date if following the words "rec'd" or "del'd," as the case may be. The last two figures of the number indicating the year when such foods were placed or taken from storage may be used, e. g.:

"Received September 1, 1911" may be written "REC'D 9-1-11," or "Delivered September 1, 1911," may be written "DEL'D 9-1-11."

Whenever tags are used on which to mark dates they must be so securely fastened to the article to which they are affixed that they cannot become detached.

4. Food held in receiving rooms for a period not to exceed one week must be stamped with the date of receipt and delivery and with the name and location of the storage company, but need not be marked "cold storage."

5. Articles of food held at low temperature during the process of manufacture will not be regarded as being held in cold storage within the meaning of this act, and such articles need not be dated.

6. The floors, halls, walls, ceilings, furniture, receptacles, implements and machinery of every cold storage or refrigerating warehouse shall be kept in a clean, healthful and sanitary condition; and, for the purpose of this rule, unclean, unhealthful or insanitary conditions shall be deemed to exist if the food stored is not securely protected from flies, dust, dirt, insects and from all other foreign or injurious contamination.

7. Toilet rooms shall be separate and apart from the rooms in which food is stored; cuspidors for the use of employes must be washed daily with disinfectant solution.

8. No employer shall knowingly require, permit or suffer any person to work, nor shall any person work, in a cold storage or refrigerating warehouse who is affected with any infectious or contagious disease.

9. The representation of cold storage poultry, fish and eggs required under section 339-c may be made by the retailer by placing upon such articles or upon the receptacle containing them, in full view of the public, a card not smaller than six inches in height by ten inches in length, upon which shall be printed the words "cold storage" in plain letters not less than two inches in height.

Tobacco Likely to Come Under Food Law.

Ever since the Federal food and drugs act was enacted, there has been considerable discussion as to the desirability of including within its provisions certain articles which are not usually classed with foods, but which, as a matter of fact, come very close to the line. Of these products, tobacco,

cosmetics and hair preparations are mentioned in the Richardson bill, now under consideration before the House Committee on Interstate Commerce.

The Richardson bill, if enacted into a law in its present form, would make section 6 read as follows:

"That the term 'drug' as used in this act shall include all medicines and preparations recognized in the United States pharmacopœia or national formulary for internal or external use, and any substance or mixture of substances, or device, intended to be used for the cure, mitigation, or prevention of disease of either man or other animals; also soda and potash lye; also cosmetics, hair preparations and dyes, and toilet preparations; also tobacco, snuffs, tobacco substitutes, and all tobacco products. The term 'food' as used herein shall include all articles used as food, drink, confectionery, or condiment by man or other animals, whether simple, mixed, or compound."

The bill also provides for amending section 7 under subdivision "first" by changing the word "a" to "any" in the phrase "is sold under or by a name," and transferring this amended phrase to the line immediately following the words, "national formulary," reading thus:

"That no drug defined in the United States pharmacopœia or national formulary shall be deemed to be adulterated under this provision of the standard of strength, quality or purity if it be plainly stated upon the bottle, box or other container thereof, although the standard may differ from that determined by the test laid down in the United States pharmacopœia or national formulary."

"Second.—If its strength or purity fall below the professed standard of quality under which it is sold."

"Third.—If it contain any methyl alcohol or wood alcohol."

"Fourth.—If any cosmetic, hair preparation or hair dye or toilet preparation contain any poisonous or deleterious ingredient."

"Fifth.—If tobacco, snuff, or tobacco products contain any added poisonous or deleterious ingredient which may render such article injurious to health; or, if any substance has been mixed or packed with these products so as to reduce or lower or injuriously affect their quality or strength; or if any substance has been substituted in whole or in part for the articles, or if they be mixed, colored, powdered, coated, or stained in any way whereby damage or inferiority is concealed; or if they consist in whole or in part of filthy, decomposed, or putrid animal or vegetable matter."

The Branding of Self-Raising Flour.

The *Operative Miller* of St. Louis says: We believe that Counsel Reed of the Millers' National Federation is very much in error in a decision he recently rendered on the subject of branding self-rising flour "compound." Secretary A. L. Goetzmann secured Mr. Reed's opinion, which is as follows:

"Taking up now the food and drugs act. A product composed, as this flour is composed, is a mixture or compound. Regulation 17 under section 8 provides: 'The principal label shall consist, first, of all information which the food and drugs act, June 30, 1906, specifically requires, to-wit: the name of the place of manufacture in the case of food compounds or mixture sold under a distinctive name; statements which show that the articles are compounds, mixtures, or blends; the words "compound," "mixture," or "blend." All this information shall appear upon the principal label and should have no intervening descriptive or explanatory reading matter.'

"Planning the face of your bag along the lines indicated in these decisions, the first thing should be the name of the substance or product—in this case 'Self Rising Flour'—the substance, being a compound, that word should next appear. Being a mixture or compound under a distinctive name, under Section 8 of the act, the place of manufacture should be given. This may follow the name of the manufacturer. So that the face of the bag if constructed in literal compliance with the regulations, should read as follows: 'Self Rising Flour, a compound, manufactured by, etc.'"

Counsel Reed in interpreting the pure food law was evidently not aware of the opinion rendered August 28th, 1911. On September 2 the *Modern Miller* printed the statement of Professor F. L. Dunlap, chairman in charge, "that it is the opinion of the Board, that the term 'self rising flour' means wheat flour with leavening agents, and it is not necessary to label such a flour 'compound,' nor is it necessary that the ingredients thereof should appear on the label."

Mr. S. H. Thompson of the Provident Chemical Works of St. Louis, an old established and thoroughly reliable company, says the ruling of Professor Dunlap is still in effect.

It is necessary that the label should state self rising flour, but the word "compound" is not necessary, and it is not necessary to state the ingredients.

Millers manufacturing self rising flour need not go to the expense of changing labels, as they are correct if they state "self rising flour," under the specific instructions of the Board of Food and Drug Inspection.

Regulation of Weights and Measures in Chicago.

The crusade against short weight in the sale of groceries has gotten down so fine in Chicago that the City Sealer of Weights and Measures has issued a special warning to butchers against trimming off and throwing away scraps of meat after weighing, as such a practice might constitute the basis for prosecution. The warning says in part:

"We would advise the butcher to protect himself by wrapping up the trimmings with the meat. Let the customers see what they are getting. They can throw them away if they so desire.

"Then some of the grocers seem to part with the dry measure with reluctance. While this office cannot take the measures away from them, we strongly advise the merchant to do away with the measure entirely and avoid temptation for themselves and their clerks.

"This will eventually apply to out-of-town merchants, and merchants in other States as well, for I honestly believe it is only a question of time when the law on weights and measures will be nation-wide.

"Every culprit caught claims that it is his first offense and that it was all a mistake on the part of an ignorant clerk, but it must be remembered that we have their records complete in this office, and that kind of evidence goes."

New Mississippi Feeding Stuffs Law.

Mississippi has a new feeding stuffs law that recently became effective and is a hurried substitute for a former law, which was declared unconstitutional. The latest law provides the usual form of marking, stating weight, contents, brand, manufacturer's name and address, and the person responsible for placing the commodity on the market. The requirements include the per cent of crude protein, crude fat and fiber, and the specific name of each ingredient used in the manufacture.

But in one particular it is distinctive. It provides a fine for the first violation, and has a clause which reads, "and any contract, agreement or note made by any farmer or other purchaser for the payment of such feeding stuffs shall be collectible for one-half of the amount agreed upon, and, if payment has already been made, such person, firm or seller shall return to the purchaser injured one-half of the amount paid."

The Cost of Living

According to the Thirteenth Decennial Census population during that decade increased 21 per cent, while the acreage of land in farms increased less than 5 per cent. What effect this has had upon prices it is difficult to determine, owing to the fact that there has been some slight increase in the product per acre; but it is plain that agriculture in the United States is not keeping pace with population, and this has considerable to do with present high prices of food products. Since the last census there has been no real change in the situation, and there is still a relative scarcity of many food supplies, which has been aggravated by an abnormal summer in 1911 and a severe winter in 1911-12.

With the economic law of supply and demand the average man apparently has little patience, believing that in this great country there are productive possibilities sufficient for all purposes. Nevertheless, the past year has witnessed a combination of unusual weather conditions that has emphasized, as never before, the fact that while this country may have large agricultural and productive possibilities the best use is not being made of them.

The first of the untoward events leading to the present difficulty was the drouth of 1911. This not only curtailed the wheat crop, but it reduced the hay crop by a matter of 14,000,000 tons, and similarly affected practically all other farm products. Extraordinary demands were therefore made upon corn and oats, because of the shortage in wheat and hay, and in themselves were sufficient to advance prices of the products, including cattle.

As if these conditions were not bad enough, a long, hard winter followed, which the cattle men declared to be the most severe in twenty-five years. Hence, instead of the relief of early pasturage, which was so earnestly desired, still greater demands have been made on all feed stuffs, with the inevitable result of high prices.

Nature has also been unkind concerning the new wheat crop. The unusually dry conditions of last summer were completely reversed in the fall, when excessive rains interfered with the seeding of winter wheat in the more northerly sections of the belt. Sufficient growth was not established before the winter set in and a large percentage of the soft winter wheat has in consequence been lost. While this has seriously affected the wheat market and has led to some frenzied speculation, it will not be a total agricultural loss, as it merely means the increase in acreage sown to corn and oats. Wheat, however, can hardly produce a record crop, and with the small reserves to be carried over from the preceding crop there will be little if any to spare for exporting purposes. Nor can any further damage be sustained without serious consequences. There has not been either the increase in acreage or in yield per acre to meet the yearly increase in consuming requirements which the table of population shows to be necessary.

MIDDLEMAN'S SIDE OF IT.

The New York State Pure Food Commission has recently been engaged in a strenuous search for the cause of the great advance in the retail price of foods during the past five or six years. Last week many butchers and grocers were cross-examined in the endeavor to find out why prices have soared. Some of the information elicited was interesting if not very enlightening.

In accounting for the advance in the cost of butcher meats several of the butchers insisted that the "consumer" is mainly to blame. One of the meat retailers declared that "You can't sell anything but the best cuts. Nobody wants the rough cuts. The class that four or five years ago liked stews and soups has all died out." Another butcher declared that "Everybody is high-toned now, and nobody is satisfied except with the best in meat and poultry." A groceryman testified that in an annual business showing sales of \$25,000, his profits, after crediting \$25 per week to himself as salary, were just \$16 for the year's transactions.

The entire circle of causes seems to have been traversed in the endeavor to fix the blame for the high food prices, and the farmer has put it on the middlemen and the middlemen have insisted that they are really not getting any big rakeoff—they are making a modest living, and that it all. But nobody pretends to deny that the prices of all kinds of food have really advanced greatly within the past decade.—*Baltimore American*.

OUR FOOD SUPPLY.

One looks about him and sees reasons why dinner tables are so expensive. The country has run out of free land. Its population goes right on up. Always fewer farmers in proportion to others. But the face of the clock does not always show the works. The government has issued a report showing the amount of food for each of us has not shrunk in proportion to the swell in price for the same.

The statisticians have taken ten leading staple products and traced the per capita supply and price for a period of forty-three years past. This shows that not since 1901 has the per capita production of these crops in this country fallen below the average per capita production for the past forty-three years. In only four years since 1878 has this happened. Beginning with 1880, when the present era of agriculture may be said to begin, the per capita production of farm crops appears to have held about the same.

Meanwhile the average cost of these products has greatly increased. Since 1896, when the low mark for the forty-three years was touched, there has been a steady rise in price as against a fairly staple per capita production. Prices in 1911 were nearly 40 per cent above the average for the forty-three years.

This showing is buttressed by consular reports of similar tendencies throughout the world. In the last ten to fifteen years wheat production has increased 2.4 per cent per person the world over, and this is about the average for the grain crops. Population is supposed to increase only about 1 per cent. If these figures do not lie, then, the world, including the United States, is producing more food per capita than ever.—*Nebraska State Journal*.

A Powerful Speech in Support of the Referee Board

Following is the speech of Hon. W. A. Rodenberg, of East St. Louis, Representative in Congress from the Twenty-second Illinois district, on March 12th, in support of the Agricultural appropriation bill.

There has been so much said in the course of the debate on the Agricultural appropriation bill and also in the public prints regarding the Remsen Board by those who favor its continued existence as well as by those who demand its immediate abolition that I feel under deep obligations to the members of the House for their courtesy in giving me an opportunity to make a detailed statement as to the personnel of the board, its functions and achievements, and its relation to the Bureau of Chemistry.

Almost six years ago we passed a pure food and drugs law. It was, without doubt, the most important and solemn duty performed by the Fifty-ninth Congress. Here was a measure designed to protect the health of all our people; but notwithstanding its beneficent purpose, there were grave doubts on the part of many as to the passage of that law because of misgivings, not as to its desirability but as to how a law of such far-reaching importance would be administered.

Enormous power was given by that law to the Department of Agriculture; power to seize and libel goods; power to change the branding of foods and drugs; power to determine the wholesomeness of their ingredients, and then, through these agencies, power to throw their manufacturers into the courts to fight no less an antagonist than the United States Government, and thus the power to suspend the operations of old-established enterprises, and compel them not only to await the slow processes of the courts, but meanwhile to rest under the condemnation of the Government and the suspicion of the people.

It is significant of the general effects which the law has developed when, after these six years, we find so many who now claim the credit for its passage. Some of these claimants are associations who would like to profit by the prestige; some are those who set up the claim as a disguise for their continued nefarious practices in the manufacture of food products, but about the lowest and most despicable are the individual claimants who travel about the country on lecture tours and speech-making enterprises on pure-food campaigns, representing that their efforts alone saved the bill.

Mr. Speaker, I denounce one and all as impostors. The pure food and drugs act is the product of the combined wisdom of the Congress which enacted it. The law was framed by painstaking, hard-working, patient legislators, notable among whom was that indefatigable worker, my distinguished colleague, Mr. Mann, at that time a member of the Committee on Interstate and Foreign Commerce, and who deserves more credit for the enactment of this legislation than any other member of Congress. These legislators had the cooperation and advice of the sturdy, honest, legitimate food manufacturers of this country, who as earnestly desired the protection which that law gives against dishonesty and fraud, in order to conserve their own business and reputation as consumers desired the law to conserve their health. We should not forget that human welfare depends quite as much upon commercial health as it does upon physical health. It is no less a sin to poison the mind of a community against a legitimate industry than for some one to sell deleterious substances to the people who inhabit the community. While I am profoundly impressed with the manner in which the law has been enforced in general and for which due credit should be given to all concerned, yet I do want to call attention to some of the conditions which the law has brought about, and which have led to misunderstandings which I would publicly correct.

The law was intended, primarily, to prevent deceit, fraud, adulteration and poisoning of our food and drug supply.

It is a great pity, Mr. Speaker, that some law could not be devised to prevent fraud and deceit upon the mind in the use of the terms "adulteration" and "poisoning." Indeed, it is the confusion of the public mind in respect of the use of these terms upon which the unscrupulous rely to carry on a most reprehensible campaign, under the banner of purity, and to basely mislead the consuming public. Adulteration is not poisoning; and poisoning is not adulteration. Water is added to milk; the milk is thereby adulterated, but by no means

poisoned. This word "poison" is a much overworked term. It imparts a shudder to the unthinking, but, as a matter of fact, we "live and move and have our being" through the use and in the very midst of substances which through legend and common usage we have come to regard as poisons. The air we breathe contains oxygen, and oxygen in its concentrated form is a deadly poison. Common table salt is composed of sodium and chlorine. Both of these elements are active corrosive poisons in their free state; combined, they have neither caustic nor corrosive properties.

Ordinary garden spinach contains arsenic; rhubarb contains oxalic acid; plums and apricots contain prussic acid; potatoes contain the deadly solanin; wines, plums, cherries, gooseberries, oranges, lemons, figs, pears and apples each contain boracic acid; huckleberries and cranberries contain benzoic acid; strawberries, raspberries and grapes contain salicylic acid; all smoked meats contain formaldehyde; honey and the fat of milk each contain formic acid; molasses contains proteids, which in turn carry sulphur; vinegar is diluted acetic acid, and acetic acid is a corrosive poison; tea contains caffeine and tannin. In combination they are perfectly harmless; but these two alkaloids when free—that is, not in chemical combination—may be highly injurious. Tannin is a powerful astringent. I need not go further into the vegetable kingdom.

In the animal kingdom we find in the most important functions of all in human beings—the digestion—that nature has placed in the digestive fluid no less a substance than hydrochloric acid, and which in its condensed form is a rank poison.

I do not attempt to explain the purpose of the Creator in distributing these and so many other so-called poisons throughout the vegetable kingdom in God's great out-of-doors. Manifestly, there was a purpose which we may partially reveal.

No food is necessarily deleterious because it contains a deleterious ingredient. That food is rendered deleterious only in proportion as the ingredient is used. Too much salt is poisonous as well as too much strychnine. When one puts salt on his potatoes he consumes sodium, chlorine and solanin—three poisonous substances—but no one claims that suicide has been attempted. It is necessarily and inevitably a question of the dose. One of our prison convicts, according to a late newspaper, recently suicided by drinking pure water. He drank it in large quantities and was dead within two hours from overdosage. The danger lies in the abuse and not in the use, especially with those substances which nature uses so unreservedly for her and our purposes.

Some years ago a scientific explorer observed that the cranberry was of all fruits the best preserved; that it invariably retained its plumpness, its coloring, and its full native flavor. He analyzed this very popular berry and found it to contain benzoic acid. It was but a step to treat benzoic acid with soda, and the assets of commerce were thereby increased by a preservative known as benzoate of soda. This preservative was quickly adopted by great preserving establishments, which desired to follow nature in the case of the cranberry and through its use both preserve and retain the full flavor of their fruit products.

I am using this circumstance merely to emphasize the usefulness of the Remsen Referee Board, for which we are asked to appropriate in the pending bill.

The Bureau of Chemistry declared this benzoate of soda to be unwholesome and ruled against its use as a preservative. The manufacturers who used it protested to Secretary Wilson. Happily, that official realized the vital issues at stake. Modern science had here found a simple method of preserving catchups, fruits, and so forth, through the use of this mild salt, and whose mother was nature herself, as a substitute for the ancient methods of preserving through the excessive use of vinegar (acetic acid) sugar, and the spices, and which latter method, let me say, is an inheritance from the Egyptian days, when their mummies were preserved with spices. Moreover, this modern, later day, twentieth century method invoked the very spirit of the law itself, since the presence of this new preservative, having neither odor, color, nor taste, presupposed cleanliness and the use of clean, wholesome materials, and could not be used, as in the case of the sugar, acetic acid, and the spices, to disguise uncleanness

and unwholesomeness in materials. The Secretary recognized also that while the analytical chemists in his department were capable of separating substances and defining their various parts, yet there were none who knew the effects of any of the parts so found upon health; and he very properly conceded the justice of a scientific board of appeals to which this and similar disputes could be referred for final decision.

It was this that impelled President Roosevelt to request the leading universities of the country each to nominate to him as a member of such a board some man who, by reason of probity of character and profound knowledge of those sciences necessarily involved in the question of the wholesomeness of a given substance upon the human system, was qualified to determine finally and indisputably the wholesomeness or unwholesomeness of an article of food. In this way five men were selected. Who were they?

Prof. Ira Remsen, president of Johns Hopkins University, of Baltimore, founder and editor of the *American Chemical Journal*, author of note, and presumably the greatest chemist in this country today.

Prof. Russell H. Chittenden, of Yale University, one of the world's greatest living pathologists, an author of fame, and a man of unquestioned accomplishments.

Dr. Christian A. Herter, of Columbia University, a renowned pharmacologist, and also a distinguished author on the subject of nervous diseases.

Dr. John H. Long, of the Northwestern University, Chicago, a pathological chemist and also an author of textbooks, and a well-known contributor to scientific publications.

Dr. Alonzo B. Taylor, of the University of California, where he was a professor of pathology, and who is now professor of physiological chemistry in the University of Pennsylvania.

Upon the death of Prof. Herter, in 1910, Dr. Theobald Smith, of Harvard University, was appointed to the vacancy. Dr. Smith's attainments are also well known and recognized wherever the language of science is spoken, and, since 1901, he has been a member of the board of directors of the Rockefeller Institute for Medical Research, in New York.

Such is the Remsen Referee Board.

It was raised to determine the dispute over benzoate of soda, already alluded to, as also another dispute over the use of sulphur in drying fruits.

Its judgment, after an exhaustive examination lasting six times as long as that of the Bureau of Chemistry, was unanimous that benzoate of soda was a harmless ingredient—a judgment which was promulgated as the ruling of the Government and which stands today, as it will ever stand, as the final word on the subject. This decision is the first handed down by the Remsen Board. It reversed Dr. Wiley who, as pointed out by the gentleman from California [Mr. Kahn], was shown, in the testimony before the Moss committee, to be incompetent to qualify as an expert in chemistry, physiology, pathology, toxicology, pharmacology, or medicine. And here again we find justification for the appointment of great experts in those very branches of science, because it is those, and those alone, which are involved in every question relating to the effects of any substance upon health.

This decision of the Remsen Board readjusted and restored business situations; it gave confidence to vast enterprises; it enabled the farmer to continue producing his fruits for sale to preserving plants; it continued in employment thousands of laboring men, women and children who were dependent upon the activities of those institutions; it has had untold influences upon whole communities which in turn were dependent upon those laboring people; and mark you, Mr. Speaker, just exactly the reverse of all this would have been true had the original decision of the Bureau of Chemistry been allowed to stand. In the light of the discovery of the erroneous conclusion let us not forget the disastrous effects if that error had not been discovered and corrected and those affected had had no redress or place to appeal.

What I have said applies with equal force to those undetermined questions now before the Remsen Board awaiting final solution. One of these is the wholesomeness of alum. Alum enters largely into the arts. It is used extensively in baking powders—those kinds whose prices bring them within the reach of the poor man's pocket. The Bureau of Chemistry has condemned this substance and desires to prevent its use. As I understand it, there has been no physiological examination to definitely determine its harmfulness. No one knows today by what scientific and conclusive authority alum has been condemned. Happily the matter has been held in abeyance, and a portion of the sum we are now asked to appropriate will go toward solving the problem, and in a way that will admit of no dispute among scientific men.

When it is settled we shall know whether there is any

justification for the condemnation of this article, or whether—like the salt composed of two elements, each harmful, but when combined become harmless—alum and its salts will not be found, when acted upon by heat and converted into gas, to have developed an entirely different combination which renders it free from injurious effects, provided it ever had any in the first place.

I might continue with other illustrations, but they are not necessary to convince me of the wisdom of the appointment and the sound reasons which exist for the continuance of the Remsen Board. We want to know. We want to be shown. We can not know too much. We can not go too high for the last word on these mooted questions. We can not go to a higher source of information than this Remsen Board. Let us continue it, and strengthen its hands, and increase its powers if need be; and furthermore, Mr. Speaker, let us help, by indorsing this useful adjunct to the pure-food law, to break down some of the insanity and hysteria which have characterized the criticisms of the board. Above all, let us by voting this appropriation voice our indorsement of the board and set the seal of our condemnation upon the unspeakably base efforts to which some commercial houses have resorted in attempting to belittle its past decision, and in trying to foster public distrust in what it has done and is doing so accurately and well.

WHOLESALE LIQUOR DEALERS IN CONVENTION

The National Wholesale Liquor Dealers' Association is holding its seventeenth annual convention at the Bellevue-Stratford Hotel, Philadelphia. Following is the program arranged for the three days of the convention, May 14th, 15th and 16th:

TUESDAY MORNING, 10 O'CLOCK.

Introduction of Mr. Edward T. Fleming, editor of the *National Herald*, by Mr. Edwin V. Dougherty of the Philadelphia Committee of Arrangements.

Address of welcome by Mr. Edward T. Fleming.

Response by Mr. Thomas C. Demmehy, president national association.

The president calls convention to order.

Annual report of the president.

Appointment of committees:

On resolutions.

On president's report.

On nominations.

On press.

Address by Mr. S. E. Kiser of the *Chicago Record-Herald*.

Report of the treasurer.

Discussion.

TUESDAY AFTERNOON.

Report of the secretary.

Address by Hon. Royal E. Cabell, commissioner of internal revenue, Washington, D. C.

Address by Mr. Michael F. Farley, president of the National Liquor League.

Report of the Executive Committee—Morris F. Westheimer, chairman Executive Committee, national association.

Discussion.

WEDNESDAY MORNING, 10 O'CLOCK.

Address by Mr. Hugh F. Harvey, chairman Executive Committee of the National Liquor League.

Address by Hon. Emmett O'Neal, Governor of Alabama.

Address by Mr. John M. Gregory, manager publicity bureau, national association.

Discussion.

WEDNESDAY AFTERNOON.

Address by Mr. Levi Cooke, general counsel, national association.

Report of the Protective Bureau, by J. Walter Freiberg, chairman Executive Committee of the Protective Bureau.

Consideration of proposed amendment to the constitution.

Discussion.

WEDNESDAY EVENING.

Informal dinner and entertainment in the roof garden of the Continental Hotel at 6:30 sharp.

THURSDAY MORNING.

Addresses.

Reports of Special Committee.

Reading of communications.

Report of Nominating Committee.

Election of officers.

Discussion of time and place for holding next annual convention.

Adjournment.

Meeting of Board of Control.

Meeting of Executive Committee.

How a State Food Inspector Works

Comparatively little is known by the people of this country about the work performed by the food inspectors of our various states. The average purchaser of foods merely knows that there are such men. Their vigilance and intelligence in the performance of their duties rarely comes under general observation. The *modus operandi* of food inspection is a sort of mystery, like the operation of a machine with many hidden parts. One-tenth part of what a food inspector does and the effective work he performs sometimes in the face of great difficulties and obstacles, is unknown except to his immediate superiors. Our food supply needs careful guarding to keep humanity free from disease. There is no longer the necessity for watching the large food manufactories that once existed, because except in sporadic and isolated instances the manufacturer of foods of a compound or mixed character is carried on by men who know the law and abide by it. The principal function of food inspection nowadays is to insure cleanliness in the preparation of food products and to prevent the marketing of animal food of a character unfit for human consumption by reason of disease or other conditions. Here is where the experienced and intelligent food inspector finds his greatest usefulness. The photographs on this page illustrate a phase of food inspection

inary told him to cut it out and that the meat was all right and fit to eat, that he would eat it himself.

"On examination of the beef carcass I saw that it was a bad case of tuberculosis; I saw some small tubular germs that they did not see and had failed to cut out, which I cut out and sealed up in a Mason jar. Before we left the meat market we seized the beef, tagged it and left the butcher a copy of the seizure papers and told him to sell no more of the beef until he heard from the Food Commission, which he said he would do.

"We brought the Mason jar with the tubercular germs to the state laboratory to be analyzed, and upon a bacteriological test by Dr. Tint it was found to be a bad case of tuberculosis.

Slaughter House Where Tuberculous Cow Was Killed.



"This case came up before Justice of the Peace I. A. McCollum of the town of Kingston, DeKalb County, Illinois, on April 23, 1912. I had Justice McCollum subpoena the following witnesses in this case: Stuart Sherman, John F. Howe, E. P. Smith, Eugene Bradford, James Ball, Fred Payne, the farmer who sold the animal, and Sid. Wakefield, who killed it and made the complaint, and Louis W. Duval, owner of the meat market, who sold part of the diseased meat before we seized it.

"We proved to the jus-



Burning the Condemned Meat.

Where It Was Seized.

Applying Kerosene Before Burning.

work of the utmost importance. The story itself is told in the very formal report of the inspector who was on the job, Frank J. Hoey of the Illinois Food Commission, to Hon. A. H. Jones, the state food commissioner. It is in the following language:

"I herewith submit to you a report of the work performed by Inspector Hobson and myself at the meat market of Louis W. Duval at Kingston, Ill., April 11, 1912, in seizing 550 pounds of diseased beef.

"Complaint was received from the state's attorney of DeKalb County that a butcher in the town of Kingston slaughtered a diseased cow and was selling it in his meat market for human food. A man whom this butcher formerly employed made the complaint to the state's attorney.

"In company with Inspector Hobson I went to Kingston to investigate this complaint. At the depot we met the butcher who made the complaint to the state's attorney and he conducted us to the meat market and identified the beef. I had the proprietor take the beef out of the ice box and bring it to the light where I could see it. I then saw that the butcher had cut out of the animal most of the affected parts, and I asked him why he had done so. He said that a veter-

tice that the meat was from a tuberculous cow and was diseased and not fit for human food. We asked the justice to give us the power to condemn and destroy by burning, which he did, and ordered the constable to help us destroy it.

"Louis W. Duval, the butcher who owned the beef, had to pay all court costs. As a witness in court he swore he did not know the cow was diseased or he would not have sold part of it in his meat market.

"We got two gallons of kerosene oil and had the beef hauled over to the woods, about a mile from the town. We then gathered up a lot of brush, piled the beef on top and poured over it the kerosene and burned it all up.

"Charles F. McKinley, attorney for the department, turned over all of the evidence in this case to the state's attorney of DeKalb County for further prosecution.

"There ought to be a law in the state of Illinois that animals killed for human food should be inspected before and after killing by a state inspector, and the butcher, except where he kills for his own use, should pay for a license from the state to slaughter. This would stop the killing of old, emaciated and diseased horses and would also stop the coun-

try butchers from buying up diseased cattle from farmers and sometimes killing them on the farms and in slaughter houses in the woods and out of the way places, and selling the diseased beef in the small country towns for human food."

INDIANA FOOD NOTES.

(From a Staff Correspondent.)

INDIANAPOLIS, IND., May 11, 1912.

Retail grocers and other food supply dealers in Indianapolis are considering a proposal, made in a general meeting of delegates representing the leading firms, to make all sales by weight and to do away with the measures, concerning which there has been so much unfavorable agitation since the enactment of a state law fifteen months ago providing for rigid state supervision over weights and measures. In addition to the fact that many housewives are now demanding that their goods be weighed, the grocers contend there is always room for prosecution by an over zealous inspector even when the greatest care is exercised in the filling of measures. The newspapers of the state have been waging a campaign for a year or more in favor of the sale of foodstuffs of all nature by weight, and this has influenced the buyers and through them the dealers.

The raised-bottom strawberry box in Indiana is having a hard time of it and is permitted to be handled only when the required number of cubic inches of strawberry content is provided for above the raised bottom. The State Sealer of Weights and Measures made it clear early in the spring that the strawberry box must contain either a full pint or full quart content, and in spite of hundreds of requests for one more year of leniency, declared the law must be enforced, and that prosecutions would follow violations. Thus far there have been no violations reported, although the state is being carefully inspected, now that the strawberry season is on.

One carload of strawberries was received from the south in boxes of less than a quart content, although obviously boxed to sell as quarts. The state authorities were notified of the receipt of the shipment, and refused to permit the sale of the berries in the boxes in which they were received. They were sold at the public market here in bulk, after having been dumped from the boxes.

Federal Judge A. B. Anderson has sentenced Oliver B. Sweet, of this city, to one year in the Federal prison and fined him \$1,000 and costs for manufacturing and selling oleomargarine without a license. Sweet pleaded guilty to the charge several months ago, and was let go under suspended sentence. He failed to observe the conditions of his release and his rearrest followed.

Only three prosecutions by the state food authorities were reported for the month of April, and one of these was for maintaining an unsanitary slaughter house. The other two were for selling hamburger steak containing sulphite, thought to have come from a Chicago market, and the other was for selling adulterated foodstuffs. The inspections have not been less rigid than during preceding months, and the state department believes the small number of prosecutions necessary was due to an effort on the part of the food dealers to comply strictly with the state food laws.

Lack of farm help to cultivate sugar beets promises to interfere with the operations of the Holland-St. Louis beet sugar plant now building at Decatur, this state, the first factory of its kind in Indiana. The managers supply the seed to the farmers and pay for the cultivation. The required acreage has been contracted for, but the 100 Belgians and Bohemians desired to cultivate the crop cannot be found. A statewide plea for help has been sent out through the state employment agency, but there has not yet been any response.

The Association of Indiana Canners, in their recent annual meeting here, adopted a resolution binding every member to a strict observance of the state food laws governing canning factories and the disposition of product not consumed in the canning. The resolution was opposed by only three or four of the nearly one hundred canners represented.

NEVADA WEIGHT TOLERANCE RULINGS.

Sanford C. Dinsmore, Deputy Sealer of Weights and Measures of Nevada, has issued the following circulars on tolerance in weights of butter and bread under the recent weights and measures law of Nevada:

TOLERANCE ON BUTTER.

An act of the Legislature fixing standard weights and measures, under Section 13, says: "Butter in a standard package

or container, sold or offered for sale in this state, shall weigh one pound and a standard package or container of butter need have no statement of the net weight of its contents thereon. Whenever butter is sold or offered for sale in a package or container, the net weight of which is more or less than one pound, such package or container shall be labeled in plain, intelligible English words and figures with the correct net weight of its contents, together with the name of the manufacturer or jobber."

Numerous experiments have been conducted by the Department of Weights and Measures, both in the field and in the laboratory, to determine the shrinkage in butter due to the evaporation of its moisture content while in transit and while held under different conditions of storage by the retail dealer. From these experiments the following decision is made: The allowable tolerance on butter in package form shall be as follows:

On 1 pound package, brick or roll, $\frac{1}{8}$ of an ounce or 2.08 per cent.

On $1\frac{1}{2}$ pound package, brick or roll, $\frac{1}{2}$ of an ounce or 2.08 per cent.

On 2 pound package, brick or roll, $\frac{3}{8}$ of an ounce or 2.08 per cent.

In determining the allowable tolerance the weight of the wrapper or carton will not be taken into consideration.

Packages of butter other than the standard one pound package must be labeled in plain, intelligible English words and figures with a statement of its true net weight, together with the name and address of the manufacturer or jobber.

TOLERANCE ON BREAD.

An act of the Legislature fixing Standard Weights and Measures, under Section 12, says: "A standard loaf of bread sold or offered for sale in this state shall weigh one pound and a standard loaf of bread need not be labeled with a statement of its weight. Whenever a loaf of bread sold or offered for sale weighs more or less than a pound, it shall be labeled in plain, intelligible English words and figures with its correct weight, together with the name of the manufacturer."

After experiments on the shrinkage of bread conducted in the Weights and Measures Laboratory, the following tentative decision is made: One-half ounce for shrinkage on one pound loaf of bread not over fifteen hours from the oven. The tolerance on a loaf of bread weighing twelve ounces shall be three-eighths of an ounce on bread not over fifteen hours from the oven.

On loaves of bread weighing less than one pound the tolerance shall be the corresponding fraction of the tolerance for the standard loaf of bread.

If a loaf of bread sold or offered for sale weighs more or less than a pound, it shall be labeled in plain, intelligible English with its correct weight, together with the name of the manufacturer.

If further tests on the shrinkage of bread should clearly show that the tolerance is too much or too little, then the Department of Weights and Measures will revise its decision.

RECENT TEXAS RULINGS.

Dr. J. S. Abbott, Food and Drug Commissioner of Texas, has issued the following rulings under food and drug law of that state:

RULING NO. 18.—IMITATION ICE CREAM.

To ice cream manufacturers of Texas: Some ice cream makers are using the phrase, "frozen milk," to evade the 8 per cent butter fat regulation for ice cream. When the phrase "frozen milk" is used the product must be true to the composition of unadulterated milk in butter fat and milk solids. Any other names applied to imitation ice creams must not be false or misleading in any particular.

RULING NO. 19.—PACKING STOCK BUTTER.

To wholesale produce dealers: The Texas food and drug law, section 2, prohibits the sale of filthy or decomposed food products. Filthy, decomposed butter, commonly known as "packing stock butter," cannot, therefore, be sold in Texas. Produce dealers and retail grocers are respectfully advised to protect the butter in their possession from those conditions that produce "packing stock butter," so-called. Butter should be kept in a clean, cool place until it is bought for consumption.

RULING NO. 20.—TO HOTELS AND RESTAURANTS.

You are respectfully advised that it is a violation of the Texas food and drug law for you to sell any adulterated or misbranded food products as a whole or part of a meal served to a patron. Adulteration and misbranding apply as well to verbal or to printed representations of a product.

United States Department of Agriculture

OFFICE OF THE SECRETARY.

BOARD OF FOOD AND DRUG INSPECTION.

Food Inspection Decision 143

THE LABELING OF CANDIED CITRON.

The Board of Food and Drug Inspection has given consideration to the question of what is the correct use of the term "candied citron," when applied to the preserved peel of fruits.

The evidence gathered by the board shows distinctly that the term "candied citron" is generally recognized in the trade, and by the consumer, to be applicable only to the candied peel of fruit of the citron tree, *Citrus medica* L., variety *genuina* Engl., a citrus fruit similar to the lemon, but larger and possessing a thick rind of characteristic flavor.

The rind of the citrus melon, *Citrullus vulgaris* Schrad., is often used in a similar manner to true candied citron. The board is of the opinion that the candied rind of this variety of watermelon, when sold in interstate commerce, must not be designated as "candied citron." It should be labeled "candied citron melon," "candied watermelon," or some similar designation.

It is also considered that such terms as "American citron," "candied domestic citron," or the like, are not correct designations for the candied citron melon and when used will be deemed misbranding, except when applied to the American product of the citrus fruit "citron," described above.

R. E. DOOLITTLE,

F. L. DUNLAP,

A. S. MITCHELL,

Board of Food and Drug Inspection.

Approved:

JAMES WILSON,

Secretary of Agriculture.

Washington, D. C., April 15, 1912.

AGRICULTURAL APPROPRIATION BILL INCREASED IN SENATE.

The Senate, in considering the Agricultural appropriation bill, took very significant action, in view of the efforts made in many quarters to discredit the Department of Agriculture. The Senate measure, which will be reported soon, provides for an increase of \$1,723,619. The amount carried by the Senate bill is \$17,656,976, and the House bill carried \$15,933,366.

This increase is distributed through many bureaus, and some of the additions are interesting. The Bureau of Animal Industry is allowed \$611,800 for "inspection and quarantine work," an increase of \$19,100 over the House bill. Part of the increase is for the new animal quarantine stations at Baltimore and Boston and part to extend the work of eradication of tuberculosis. A provision for the inspection of butter factories is unchanged.

For "investigations and experiments in animal husbandry" \$52,180 is allowed. The appropriation last year was \$47,480, and the increase is for experiments in animal husbandry at the Beltsville farm.

Another provision authorizes exchanges, so that surplus animals may be disposed of without loss and sales made without condemnation or auction. The \$50,000 allowed in the House bill for "co-operative experiments in animal feeding and breeding" is increased to \$100,000 to provide for "experiments in the breeding of horses for military purposes." In the Bureau of Plant Industry the appropriation for "investigations of plant diseases and pathological collections" is increased by \$6,570.

An appropriation of \$5,000 is allowed for the investigation and improvement of ginseng and the control of its diseases. The value of ginseng exported last year was more than \$1,000,000. An increase of \$4,000 is made in the item "for investigating the ginning, handling, grading, etc., of cotton," and provision made for the purchase of machinery to make tests to determine the spinning value of different grades of cotton.

For collecting, testing, etc., rare seeds, bulbs, etc., the increase is \$49,320, to permit the purchase and distribution of drought-resistant field seeds. An extra \$10,000 is allowed in the appropriation for investigations to improve cereals and methods of cereal production, and the same increase is made

to study sugar-producing plants. There is added \$1,930 for investigations and improvements of grazing lands.

To study methods of fighting the cotton boll weevil an increase of \$27,940 is provided. The allowance to enforce the food and drugs act is increased \$25,000. This accords with the estimate and is to permit an increase in the force of scientific employes and investigation. For the purchase of what is known as the Marsh test to detect artificial coloring matter in whisky \$5,000 is allowed. The payment of this sum includes full satisfaction for previous use of the patent.

SAUSAGE AND OTHER MEAT LABELS.

The Federal meat inspection authorities have again amended their regulations covering sausage labels, etc., by specifying the size of type in which statements must appear on labels specifying the added ingredients, such as "potato flour added," etc. The regulation as amended explains itself, and is as follows:

"Labels for meat and meat food products to which cereal, potato flour or similar substances are added will in the future be required to have the statements 'Cereal added,' 'Potato flour added,' etc., appear thereon in type of such size as will be in good proportion to the name of the product, provided the product does not contain more than 5 per cent of cereal, potato flour, etc. If this percentage is exceeded, the words 'Cereal,' 'Potato flour,' etc., must appear as a part of the name of the product in the same size and style type and on the same line; for example, 'Sausage and cereal,' 'Sausage and potato flour.'

"The addition of 'meat products' to any meat or meat food product shall be stated on labels in type of sufficient size to give the statement prominence, provided the addition of such products does not exceed 20 per cent. If this percentage is exceeded, however, the words 'Meat products' must appear as a part of the name of the product in the same size and style of type and on the same line; for example, 'Potted meats and meat products.'

"In the future labels for meat and meat food products containing added substances submitted for approval by inspectors in charge should be accompanied by a statement showing the percentage of such added substances contained in the products to which the labels are to be applied."

EIGHTH INTERNATIONAL CONGRESS ON APPLIED CHEMISTRY.

A recent press bulletin of the Eighth International Congress on Applied Chemistry announces the titles of 148 additional papers out of a grand total of 683 papers now definitely promised to the 24 sections of this Congress. At some of the preceding Congresses the grand total number of papers finally presented was in 1903, 479 papers; 1906, 658 papers; 1909, 985 papers as against the 683 promised to this Congress, four months before the meeting thereof.

The bulletin further says: "We suggest that many of your readers may not be fully alive to the necessity of getting their papers in the hands of the American Committee before June 30, 1912. All such papers, if accepted, will be printed and ready for distribution at the opening of the sessions in New York, September 6, 1912; papers received after June 30 will probably not be printed at that time. All papers should be sent flat; they should not be rolled nor folded. They should all be typewritten in duplicate and accompanied by an abstract also in duplicate and typewritten. The American Committee may be compelled to reject all hand written manuscript.

"Membership in the Congress should be completed by all prior to July 1, 1912, otherwise such members may not receive the printed proceedings.

"Rooms at the Residence Halls at Columbia University will be reserved for foreign visitors until August 15, 1912; after that date rooms will be assigned to applicants resident in the United States."

The Congress will be held in Washington and New York, September 4 to 13, 1912.

DR. PAUL C. FREER DEAD.

Dr. Paul C. Freer, Director of the United States Government Scientific Bureau in the Philippines, died April 17th. Dr. Freer was mentioned in recent Washington dispatches as a possible successor of Dr. Harvey W. Wiley as chief of the Agricultural Department's Bureau of Chemistry. Dr. Freer was a native of Chicago, a graduate of Rush Medical College and of the University of Munich. He was born in 1862, was Professor of Chemistry in the University of Michigan, superintendent of the Government laboratories in Manila and was appointed Director of the Bureau of Science in 1905.

THE AMERICAN FOOD JOURNAL



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SOFT DRINKS IN ILLINOIS.

The *National Bottlers' Gazette* refers in a recent issue to certain "rulings" it believes to have been issued by the Illinois Food Commission and declares that Commissioner Jones "sets forth a number of things that are simply indefensible. In other words, he insists on certain ingredients being in certain drinks—to make them true to name—but certain other drinks are allowed to use the old names whether any ingredient of the name is in the beverage or not."

To elucidate, the features of the rulings referred to that have aroused the critical attention of the *Gazette* should be indicated. Incidentally, it should also be stated that these are not rulings of the Illinois Food Commission but part of a letter of the attorney for the Independent Bottlers' Protective Association of Illinois to his clients. They have never been promulgated in official form. Some of them are as follows:

1. Ginger Ale: That the name "Ginger Ale" is a sufficient labeling for the product which has been commonly known for many years past as "Ginger Ale." When sugar color, that is, caramel coloring, is used in Ginger Ale, its presence need not be declared. The same is true of the presence of Capsicum. Sugar color and Capsicum are ingredients covered by the name "Ginger Ale."

2. Root Beer: The name "Root Beer" is a sufficient labeling for the product which has been commonly known for several years as "Root Beer." The presence of Sugar Color need not be declared, the same being covered by the name "Root Beer."

3. "Sarsaparilla" or "Brown Pop." The name "Sarsaparilla" or "Brown Pop" is a sufficient labeling for the product which has been commonly known for several years as "Sarsaparilla" or "Brown Pop." The presence of sugar color in this product need not be declared, the same being covered by the name "Sarsaparilla" or "Brown Pop."

4. Birch Beer: The name "Birch Beer" is a sufficient labeling for the product which has been commonly known for several years as "Birch Beer." The presence of sugar color need not be declared in this product, the same being covered by the name "Birch Beer."

5. "Lemon Pop" or "White Pop." The name "Lemon Pop," "Lemon Soda Water" or "White Pop" is a sufficient labeling for the product known as "Lemon Pop," "Lemon Soda Water" or "White Pop." This product, however, must have a true lemon flavor to come under this ruling.

6. Cream Soda: The name "Cream Soda" is a sufficient labeling for the product which has been commonly known for many years as "Cream Soda." The presence of sugar color need not be declared. When represented as "Vanilla Pop" it must have a true vanilla flavor.

17. Labeling: All goods must be labeled with the true name of the article, as indicated in this letter, and the name

and address of the manufacturer, or the name and address of the packer or dealer who sells the same.

18. Size of Type: Whenever the size of the package will permit the size of type used for labeling must not be less than 8 point brevier caps.

19. Labeling Goods in Hutchinson's Stopper Bottles: When goods are put up in Hutchinson's Stopper Bottles the ruling will be complied with if the labeling required is on the case in which the goods are delivered by the manufacturer.

20. Labeling in General: Whenever it is possible to label each individual bottle the same should be labeled with the true name of the article and the name and address of the manufacturer, packer, or dealer who sells the same.

As aforesaid, these are not official rulings of the Illinois Food Commission. They are the outcome of a conference between the food officials of Illinois and representatives of the Independent Bottlers' Association, and embody most of what was tentatively agreed to at the conference. We quote only those that relate to labeling several of the more popular kinds of soft drinks.

The *National Bottlers' Gazette* prefers, as a matter of editorial policy, doubtless, to let them go to its readers as the official rulings in Illinois, and it further assumes, because certain ingredients were not mentioned as common to certain drinks, that "any old thing" would be permitted in such drinks. Under No. 17 it is stated that "all goods must be labeled with the true name of the article," which would controvert this assumption. If there were indeed official rulings, there is nothing in them contrary to the laws of Illinois, however much they may be regarded by some persons in the trade as permitting wrong practices. Under an official ruling made last year, saccharin is not permitted any longer to be used in food products in Illinois, and there seems perhaps a basis of complaint against these "rulings," for the shoe pinches some Illinois manufacturers of soft drinks right at that point of saccharin. Possibly these manufacturers inspired the unjust criticisms of the Illinois Food Commission in the *National Bottlers' Gazette*.

A circumstance to be taken into consideration in all rulings on labeling henceforth is the recent decision in the Alart & McGuire case in New York on the question of labeling prepared mustard. Judge Holt of the United States District Court for the Southern District of New York held that it was unnecessary to indicate the presence of charlock, turmeric, vinegar and spices in prepared mustard by labeling, inasmuch as those ingredients had always appeared in prepared mustard. The same decision must be taken for granted, as an example, in the case of capsicum in ginger ale, because that ingredient has appeared in ginger ale in common practice. A legal contest upon that point would likely be lost by a food commission prosecuting for the non-labeling of capsicum if the Alart & McGuire case may be looked upon as setting a precedent, as it undoubtedly does.

TRUSTS AND PROTOCOLS.

In this country we call a combination in restraint of trade a trust, and forbid it by law. In Europe they call it a protocol and encourage it. Governments take a hand in framing the provisions of a protocol, the terms of which will have the effect of limiting the output of a certain commodity or of determining how much of it may be bought or sold by each party to the agreement. The plain purpose of all this is to regulate in an agreeable and sensible manner the conditions of supply and demand so that the least inconvenience may be felt by all concerned. In the United States, we have the spectacle of the so-called sugar

trust being investigated and threatened with prosecution. No doubt the big sugar refiners have done some wrong things. There are the customs frauds to their discredit, and their very evident but concealed efforts to limit the market for saccharin.

But above all there is the economic question of supply and demand to be considered in anything done by this so-called trust to regulate supply and demand, whether to its own advantage or the advantage of the consumer. Last summer we had a considerable rise in the price of sugar, approximating 50 per cent. At that time there was much discontent on the part of consumers of sugar and the refiners issued a statement in which they referred to the fact that they were not growers of sugar and could not, therefore, control the crop supply; that prices made by them were made upon the basis of supply and demand, and in the face of much adverse criticism this statement appealed to thinking men as reasonable and truthful.

The *Daily Consular and Trade Review* in a recent issue deals with the European protocol upon sugar formulated at a convention in Brussels in March, in which the governments of Germany, Austria-Hungary, Belgium, France, Luxemburg, Netherlands, Peru, Russia, Sweden and Switzerland joined. The agreement, which was signed March 12th, will be in force until August 31, 1918. The main point at issue was the amount of sugar which Russia should be allowed to export annually. In 1907, when Russia first became a party to the convention, it was agreed that during the following campaign year Russia should be allowed to export 300,000 tons of sugar to countries where such sugar would come into competition with the sugar produced by the other signatory countries, and for each of the following four campaign years the exportation of Russian sugar to such countries was limited to 200,000 tons. At the present conference Russia has succeeded in having its annual export quotas increased as follows:

In accordance with Article 2 of the protocol, the export quota of 200,000 tons accorded Russia by Article 3 of the protocol of December 19, 1907, for each of the four years from September 1, 1909, to August 31, 1913, is maintained for each of the five years from September 1, 1913, to August 31, 1918.

Taking into consideration the fact that in consequence of exceptional circumstances in 1911-12 a scarcity of sugar and at the same time a considerable increase in the price of sugar in the world market are to be observed, the contracting states give their consent that Russia shall be allowed to export a special extra quota, to be divided as follows: For the campaign year 1911-12, 150,000 tons; for the campaign year 1912-13, 50,000 tons; for the campaign year 1913-14, 50,000 tons.

The distribution of the extra quotas of 50,000 tons each for the campaign years 1912-13 and 1913-14 is further limited, so that during each of the four six-months periods included the exportation of Russian sugar shall not exceed 25,000 tons.

Article 4 of the protocol makes provision for the possible continuance of the convention after 1918 as follows:

In the session which precedes September 1, 1917, the permanent commission will enact by unanimous vote the course to be followed by Russia in case she should be disposed to continue her participation in the convention after September 1, 1918. In case the commission can not agree, Russia will be considered to have denounced the convention, as from September 1, 1918.

This protocol, signed by the representatives of the various Governments, was to be ratified before April 1, 1912, and was to take effect on that date upon ratification by at least the following European sugar-exporting countries: Germany, Austria-Hungary, Belgium, France, the Netherlands and Russia.

CRITICISM OF THE FOOD LAW.

Some of the views of Francis E. Hamilton, a well-known New York attorney who has devoted much attention to food laws, will appeal to food importers who find themselves in a situation where they have to satisfy both customs and food inspectors as to the character of their goods. Mr. Hamilton proposes that such importers shall have the right to appeal from a decision made at a hearing before the Board of Food and Drug Inspection to the Customs Court. He suggests that this provision be incorporated in an additional section in the Federal food and drugs act in the following words:

The Secretary of Agriculture shall within ten days after the time of the hearings, as directed in Section 4 and in Section 11, give notice in writing to the owner, consignee or party from whom samples were obtained, of his decision as to any violation of any of the provisions of this act. Within ten days thereafter the said owner, consignee or party from whom samples were obtained, shall have the right to protest against such decision, in writing, setting forth fully the grounds for such protest, and the matters in dispute shall be referred for decision to a board of three United States General Appraisers designated by the Secretary of the Treasury, which board shall grant full opportunity to the owner, consignee or party from whom samples were obtained to present all evidence before it within thirty days from the time of such appeal; and the decision of such board shall be final and conclusive unless appealed from by either party to the United States Court of Customs Appeals, in the manner and form provided for in customs cases.

Mr. Hamilton makes some other criticisms of the food and drugs act, based upon the present form of its administration. In a statement recently published, he says:

"The Pure Food Law is supposed to be administered by the Secretary of Agriculture, certain powers being vested in him in conjunction with the Secretary of Commerce and Labor and the Secretary of the Treasury.

"This is wrong. The power should be absolutely located in one department, and disposition to avoid responsibility on the part of the Secretary of Commerce and Labor and the Secretary of the Treasury has been well exemplified in the recent decision covering saccharin, where Secretary MacVeagh insisted upon a totally different conclusion from that recommended by Secretary Wilson, whereas Secretary Nagel sidestepped the proposition and insisted that the Secretary of Agriculture should be the responsible party.

"Any attempt to divide responsibility results in the shifting of the same, even among Cabinet officers. Under the law the Secretary of Agriculture is theoretically the head of the Pure Food Department, but ever since the law has been in operation he has indorsed, almost without hesitancy, the conclusion reached by the Chief of the Bureau of Chemistry.

"The appointment of Mr. McCabe, Dr. Dunlap and Dr. Wiley as a pure food board was made by Secretary Wilson, with the purpose of establishing a bureau qualified and authorized to handle pure food matters. Such a bureau should very properly consist of a chemist, a business man of large experience and a lawyer of equally large experience. While an immense amount of good has been achieved by the present pure food board, the fact that it has been dominated more or less by the individual opinion of two out of three members in many cases, regardless of the broad requirements of the trade, has resulted in giving attention to a thousand and one infinitesimal matters—for instance, the size of type to be used upon labels, the elimination of certain ingredients not detrimental, but in disagreement with judgment of the chief chemist, the impropriety of pictures upon labels and fifty other trifling matters—all support the idea that this

board should be big enough to discuss questions and determine the same upon broad principles of universal, rather than particular interest.

"Hearings upon questions arising at various laboratories should be had at great ports of importation, with the right of determination, except in most important cases. When an importer is notified that his goods have been held up because they are thought to contain an ingredient detrimental to health, he should not be obliged to employ an attorney to visit Washington and spend long periods of time in a hearing before the Pure Food Board, but he should be given an opportunity of making proof before laboratories in question and that laboratory should have authority to release his goods if satisfied of their innocuous qualities without submission to Washington."

GALVANIZING AN ANCIENT BUGABOO.

Bakers and flour manufacturers are unnecessarily sensitive about what they call the "fiction" concerning the former use of alum as a whitener of flour and bread. We admit, and everybody else who has observed modern baking methods will admit, that alum is not now used for any such purpose and has not been so used for a great many years. Evidence to that effect is positive. Evidence that it has never been used is only negative. The *American Miller* goes so far as to admit that "forty or fifty years ago millers occasionally 'touched up' grists of wheat that had been harvested in wet weather by feeding a little alum into the eye of the stone." It also admits that sixty years ago bakers in European countries might have used alum. The same state of facts fits a lot of other adulterations of former years. A story went the rounds of the press a few years ago that calcium succinate was a common adulterant of milk. As a matter of fact, this adulterant has disappeared for fifteen years. The abandonment of the old bogus jam made from pumpkin and millet seed is more recent. A hundred other forms of food adulteration, some of them perhaps entirely fictitious, are in the same class of innocuous desuetude.

To worry because these ancient practices are occasionally mentioned is to surround an honest trade with an atmosphere of suspicion. On that account we deprecate the "defi" hurled by Jay Burns, president of the Omaha Master Bakers' Association, at Commissioner Hansen of Nebraska, because the commissioner, in the course of his remarks before the Manufacturers' Association of Omaha, referred to alum as a former adulterant of bread and flour. Commissioner Hansen included in his address a statement that practically all of the adulterations he mentioned, which included the milk and jam cases spoken of, had been done away with because manufacturers of food products had reformed their practices as a result of enlightenment and a general desire to obey the law. The law came first, said the commissioner, but its enactment was followed by a reformation in manufacturing methods, in most cases spontaneous.

The reference to the ancient use of alum in bread aroused the ire of Mr. Burns—on what account it is difficult to determine. The *American Miller* makes the incident the basis of a leading article in its May issue, and indulges in some strictures on Commissioner Hansen that are unjust, or at least in poor taste. To read them, one would conclude that the commissioner had been guilty of an ignorant and ill-considered utterance, instead of having stated in moderate language a commonplace fact concerning a practice admittedly abandoned everywhere.

ESSENTIAL OIL PRESERVATIVES.

The American Medical Association is on record as opposing the use of benzoic acid and its salts as preservatives in foods. The *Journal of the American Medical Association*, organ of the association, as well as the association itself, recognizes the necessity for preserving foods in some way, and is assiduous in discrediting benzoic acid and benzoates, both actively and negatively. We note a recent editorial in the *Journal* on "Spices as Preservatives," in which the following occurs:

Just what condiments have value as food preservatives has not been conclusively determined. According to the observations of Hoffmann and Evans on apple-sauce (which they used as material for study), ginger, black pepper and cayenne pepper do not prevent the growth of micro-organisms; whereas cinnamon, cloves and mustard are valuable preservatives, and nutmeg and allspice delay growth. Cinnamon and mustard are particularly valuable, for they are palatable even when used in proportions that prevent all growth.

The active antiseptic constituents of mustard, cinnamon and cloves are their aromatic or essential oils. Cinnamon, for example, yields cinnamic aldehyd, which appears to possess a preservative action superior to that of benzoic acid, and aids materially in preventing the spoiling of foods to which the condiment is added. In view of these experiments it seems rational to urge the more liberal use of the delicious cinnamon and cloves in place of such ineffective spices as pepper and ginger. The latter are commonly irritating to the mucous membranes; and now that we know condiments which quite surpass them as preservatives, the use of the irritating type in preserved foods may appropriately be restricted to the purposes of flavor alone. As Hoffmann and Evans remark, it is a "lucky coincidence" that some of the most attractive flavoring spices also help to keep the food from spoiling.

There is just as much justification for the use of a preservative as a preservative for the use of a condiment as a preservative. To use too much of a condimental preservative is as ill a thing as to use too much of a chemical preservative. Essential oils having an irritating action on mucous membrane used in considerable quantities to get a sure preservative effect are as indefensible as any other preservative likely to have an injurious effect on the rather delicate mechanism of digestion.

Those German scientists who took up the study of benzoate of soda regretted that nothing of a positive character to show the absolute harmlessness of that article had been adduced. They admitted that nothing to show its harmfulness had been conclusively brought to the attention of the scientific world. This seems to us to be begging the question. In the face of this, we have the admission, here published in the organ of a society on record as opposing benzoic acid and its salts as a preservative in foods, that essential oils are irritant as well as antiseptic, and as certainly harmful in foods as benzoate of soda, if not more so.

FIRST PROSECUTIONS.

The United States District Attorney for the Northern District of Illinois on May 7th filed suit for the Government, charging the Sherwin-Williams Company, of 28 Jackson Boulevard, and the Devoe & Reynolds Company, of 171 West Randolph Street, Chicago, both paint concerns, with the sale of adulteration of poisons, used by farmers.

These are the first poison cases taken up by the Government, following the passage of a law enacted by Congress April 26, 1910. These laws were enacted to protect the farmers from imposition in their purchases of pure poisons, used by them to drive out various insects. Both of the firms are charged with the adulteration of lead arsenate.

Household Science and the Table

A CHAPTER ON SALADS.

By Elenora Elizabeth Reber.

This is a most appropriate season of the year in which to consider the subject of salads, although salad concoctions are not strictly in the class of "seasonable" foods. The universality of salad has grown to include all parts of the world, every portion of the year and almost any meal hour of the day, yet it is also true that in springtime and summer the appetite welcomes with special gusto such foods as have pungent and tart flavors, and in this class must be placed at the head of the list salads.

That the salad has been handed down to us from antiquity is a well-proven fact, but just how old the dish is no one can tell. Someone declares the age to be six thousand years, while an Italian poet named Molza wrote some verses in which he claims that Adam in his fallen state was the first concocter and consumer of salad. At any rate the Egyptians ate salad and Cowper, translating Virgil, has a poem entitled "The Salad," dignifying by that name the piquant dish described by the Latin poet.

There is an Italian proverb which says of a man in need of money, "He wants one of Sixtus V's salads," which does not mean that that worthy pope ate salads of gold, but the saying is founded on the story which goes somewhat as follows:

When Pope Sixtus V was an obscure monk he had a great friend in a certain lawyer, who sank steadily into poverty as the monk rose to the papacy. The poor lawyer finally decided to journey to Rome to seek aid from his old friend, the pope, but he was so unfortunate as to fall ill by the way-side, and told this doctor to let the pope know of his sad state. Upon being advised of the condition of affairs with his old lawyer friend Sixtus said, "I will send him a salad," and he duly dispatched a basket of lettuce to the invalid. When these lettuces were opened, money was found in the hearts, thus furnishing foundation for the proverb quoted above.

The Rev. Sidney Smith's verses on salad have been oft quoted and the lines are worthy of repetition since there is not only cleverness in their arrangement but a very excellent recipe is contained therein. The passage runs:

"Two large potatoes passed through kitchen sieve,
Smoothness and softness to the salad give;
Of mordant mustard add a single spoon—
Distrust the condiment that bites too soon—
But deem it not in man of herbs a fault,
To add a double quantity of salt;
Four times the spoon with oil of Lucca crown,
And twice with vinegar procured from town;
True flavor needs it, and your poet begs,
The pounded yellow of two well-boiled eggs.
Let onion atoms lurk within the bowl,
And scarce suspected, animate the whole.
And lastly in the flavored compound toss
A magic spoonful of anchovy sauce.
Oh great and glorious, oh, herbaceous treat!
'Twould tempt the dying anchorite to eat.
Back to the world he'd turn his weary soul,
And plunge his fingers in the salad bowl."

And speaking of "fingers in the salad bowl," it is interesting to note that in olden time salads were always mixed by the prettiest and youngest woman present, and she always did it with her hands. This was so well understood that down at least to the time of Rousseau the phrase, "She can mix the salad with her fingers," was often used to describe a woman as being still young and beautiful. One old author goes so far as to say that no salad can be perfect which has not been "fatigued" (i. e. mixed) by a girl who is frivolous and fifteen!

But to turn from interesting story to prosaic features of salad making as practiced in the twentieth century by the clever housewife who long since learned to follow the custom which displaces the fingers with forks in the process!

To make a really good salad should be every true woman's ambition, and while the simpler ones are comparatively easy to compose, even those more complex may be soon mastered by the observance of a few invariable rules. It is, of course, the dressing which demands the greatest skill and attention of the salad maker and upon its success the excellence of the completed dish largely depends.

The simplest of all salad dressings is the French dressing, which consists of one-half cupful of olive oil, one teaspoonful of salt, a pinch of cayenne, two tablespoonfuls of vinegar, one tablespoonful lemon juice, all ingredients being put together and stirred well until blended. It is this dressing which probably called forth the familiar remark that for the proper making of a salad four individuals are needed—a miser for the vinegar, a spendthrift for the oil, a sage for the salt and

a maniac for the mixer. To the last named individual, however, exception must be taken, for no salad should be madly mixed.

When this dressing is to be applied to lettuce or any fresh vegetable the mass should be gently and systematically turned over and over, around and about, reversed, amalgamated and tossed so that every portion of the vegetable is imbued with the mixture, and no drop of dressing left at the bottom of the bowl. This mixing process should, however, be a steady and even one, without haste or fury; the movement should be methodical, calculated, thorough, "almost caressing," as one expert says.

Then there is the mayonnaise dressing, that supreme test of the salad maker's skill, although with proper "tools" the process is not so difficult as it once was. There is now to be had an inexpensive contrivance for mixing mayonnaise consisting of a small funnel, slightly open at the point, the opening being closed at will by means of a screw. This funnel holds about half a teacupful of oil and is simply fastened to the handle of an ordinary egg beater. The yolk of a fresh egg is placed in a small bowl, previously made cold; the funnel is filled and screw loosened sufficiently to allow the oil to drop slowly as the beating proceeds. When one funnellful of oil has been added to the egg the seasoning may be put in. This consists of the juice of half a lemon and half a teaspoonful each of paprika, mustard and prepared salt. A second funnellful of oil may then be added, this time in a much larger stream. The prime requisite for the accomplishment of this dressing is that the egg shall be fresh.

It should always be remembered when making vegetable



MATERIALS FOR FRUIT SALAD.

salads that only fresh, crisp vegetables should be used, or if they have become slightly wilted as in the case of lettuce, celery, endive, parsley, etc., place in ice cold water for about an hour and dry thoroughly before adding the dressing. It is also important to observe that to have the best results with salad never add the dressing until just before ready to serve. When making cold dressings it is essential to have the oil, vinegar and eggs chilled through.

Fruit salads are gratefully received and may be made especially attractive to the eye. By the way, it is well to remember that an artistic and appetizing appearance is an important factor in the garnishment of a salad, as of other dishes. Pieces of lemon, slices of hard boiled eggs, olives, parsley, slices of pickle, slices of ripe tomatoes, sections of



LETTUCE POTATO SALAD.

orange, nuts are but a few of the articles that may be rightfully used for salad garnishment, according to the character of the mixture.

There is almost no limit to the kinds of food that may be utilized for salad, the list including fruit, nuts, vegetables, meats and various mixtures of part or all of these classes of ingredients.

A fruit and nut salad which finds much favor is made with equal proportions of pineapple, orange, banana and a few nut meats. Mix and arrange on lettuce leaves and apply the dressing just previous to serving. Plain crackers are eaten with such a salad by many people.

Asparagus when utilized as a salad is usually served with mayonnaise dressing, and a dish of this delectable vegetable garnished with hard boiled egg sections would be hard to improve upon for a simple, easily prepared salad in the estimation of those with whom asparagus is a prime favorite among vegetables.

Green peppers make pretty and pleasing pungent cases for various salads. One that is given as somewhat novel is made by rubbing sardines, first boned and skinned, to a paste and mixing with an equal amount of cottage cheese. Split in half the peppers and remove the seeds and core, then fill the cases with paste, leaving a little opening. Sprinkle with French dressing and serve on individual plates with endive for garnishing.

Another salad made with cheese and ripe olives is somewhat out of the ordinary. Ripe olives are a California product and are quite different from the imported green pickles with which we were so long and exclusively familiar. Ripe olives in cans can now be secured at any up-to-date grocery store. Chop these olives fine, mix with cream cheese, moisten with French dressing, shape the mixture into balls and serve on lettuce leaves.

A salad served at a luncheon recently was made of cold boiled spinach formed into nests which were filled with small yellow eggs. The eggs were composed of hard boiled yolks seasoned with melted butter, salt, paprika, a trace of onion juice and a little minced parsley. The spinach after cooking had been drained, chopped fine, seasoned with butter, salt and pepper and fashioned into nest shapes. In the bottom of each nest was placed a little mayonnaise dressing and on this the eggs.

A variation of the old familiar lettuce-potato salad is made as follows: Shred the lettuce till very fine and set away in a cool place. Peel and cut raw potatoes into dice-shaped bits and cook in salted water with two or three onions; take out when done, remove the onions, pour over the potatoes while they are still hot a dressing of oil, vinegar, pepper and salt and set away to cool. Let the potato become very cool be-

fore putting on the lettuce, which should be dressed with a little of the same sort used for the potato. The advantage in dressing the potatoes when hot is that it gives the dressing a chance to soak into the vegetables and to flavor them thoroughly, besides giving them that sort of creamy consistency which they do not seem to acquire if dressed when cold. Sections of cold boiled eggs are an appropriate garnishment for this salad. It is much better to secure the flavor of onion by boiling with the potatoes as suggested than to bring about that result by adding raw onions, sliced or chopped.

SALMON AND GREEN PEA SALAD.

Then there are fish and meat salads which we must not overlook, as they occupy a prominent place among this kind of dishes. They may be made by mixing with vegetables, or without, though it is probably more often that the former practice is followed. An appetizing salmon and green pea salad may be made as follows: Flake some cold boiled salmon and put it with cold boiled green peas on lettuce leaves. Over all sprinkle lemon juice generously and salt and pepper. Set away for an hour or longer on ice. When ready to serve remove from the icechest and coat the salad with mayonnaise dressing. Grated Parmesan cheese is considered by some as a welcome addition to this salad.

BACON SALAD.

The Boston Cooking School is authority for the fine quality of a bacon salad which is made by cutting slices of tender bacon into small squares and frying until a delicate brown color. Then remove the bits to soft paper and drain thereon. Heat five tablespoonfuls of bacon fat and two tablespoonfuls of vinegar in a saucepan. Beat together the yolks of three eggs, one-fourth teaspoonful of pepper and mustard and with the last named ingredients cook over hot water until the mixture thickens slightly. When cold cut the leaves of a head of lettuce into ribbons by cutting across the grain. Toss the lettuce and squares of bacon together and mix with the dressing. A pinch of salt may be added if desired, but to many palates the seasoning of that ingredient from the bacon will be sufficient.

HOT EGG SALAD.

Into a saucepan put one tablespoonful of olive oil, one-fourth teaspoonful salt and a dash of pepper. When hot break into this three eggs; as the eggs begin to set stir them slightly so as to partially mix the yolks and whites and yet have them show separately. When firm turn out on a dish, garnish with chopped pickles and a little grated lemon peel and serve at once with a French dressing.

Asparagus an Early Vegetable.

Coming at a time when few other fresh vegetables are plentiful, asparagus is hailed with delight by housekeepers and cooks. Few vegetables are of finer or more delicate flavor than asparagus and its wholesomeness is unquestioned also. We are advised that chemical analysis offers no explanation for the pleasant flavor of asparagus, but assigns to it a decidedly high nutritious value. In this vegetable is found one of those interesting examples of a food which, containing more water in its composition than does milk, is nevertheless a solid substance. Thus the head of the asparagus contains slightly more than 93 per cent of water. The solid constituents, however, are particularly rich in nitrogenous substances. The vegetable may be eaten in almost unlimited quantity without fear of possibility of any undesirable effect if one is healthy. For the gouty it is sometimes ascribed as an injurious food.

Ways of preparing asparagus for the table are numerous and few of them offer any difficulties whatsoever to the plainest cook. The vegetable unfortunately loses its original flavor very rapidly after being cut, so those who can gather it from their own gardens are particularly fortunate. The necessity of having the asparagus fresh cut in order to secure its best quality is what causes many people to prefer the canned article to the fresh, since canneries are invariably located in or very near the fields so that the vegetable can be prepared and canned with the minimum delay and thus insure the retention of the maximum of flavor. A prominent Illinois canner declares that his asparagus is in the cans in less than two hours after cutting. The recipes here given apply with equal success whether the fresh or canned article is used.

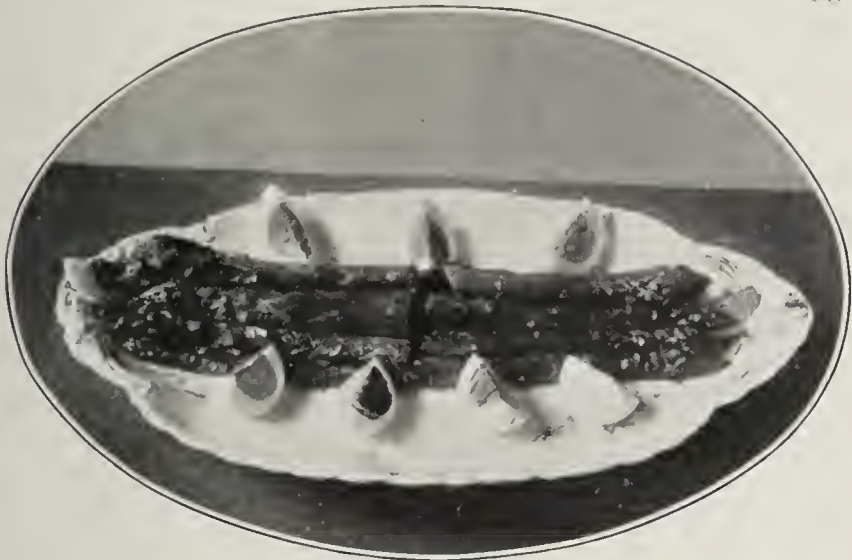
BAKED ASPARAGUS.

Wash two small bundles of asparagus (if fresh is used) until perfectly free from sand, and stand them upright in a kettle of water, leaving the tender tips uncovered. In this way the steam will cook the tips while the boiling water is making the stalks tender, and the former will not be cooked.

to pieces, as is too often the case. When tender drain and cut into small pieces, removing only the toughest portion of the ends. To each two cupfuls of asparagus add an equal amount of grated breadcrumbs, two tablespoonfuls of butter, one cupful of milk, a half teaspoonful of salt and three or four dashes of pepper, dust a well buttered mold lightly with crumbs, then arrange the asparagus and crumbs in alternate layers, dusting each with salt and pepper and dotting with bits of butter. The last layer should be crumbs. Pour over the dish the milk and bake in a moderate oven for twenty minutes. Serve hot.

ASPARAGUS MOLD.

Make a cream sauce with two tablespoonfuls each of flour and butter, one-half teaspoonful of salt, a dash or two of pepper and one cupful of cream. When smooth and boiling add one-half cupful of cold chicken or veal chopped fine, one cupful of cooked asparagus tips and four well beaten eggs.



SIMPLE ASPARAGUS SALAD.

Line a well buttered mold with cooked asparagus tips and turn in the asparagus mixture. Set the mold in a dish of hot water and bake in a hot oven until the center is firm. Then let stand a few minutes, after which invert over a shallow heated dish and gently lift the mold. Serve with butter sauce.

ASPARAGUS ON TOAST.

Wash fresh asparagus carefully and boil as directed in the first recipe given here. Cook a small onion, chopped fine, a bay leaf and six peppercorns in two tablespoonfuls of butter until it bubbles, but do not allow it to brown. Add gradually three level tablespoonfuls of flour, and stir and cook until smooth and thick, then add two cupfuls of chicken or veal broth, or milk and a pinch of nutmeg and cook this five minutes. Strain in a saucepan and add very gradually the well beaten yolks of two eggs and one tablespoonful of lemon juice. Add bit by bit, to prevent boiling, one tablespoonful of butter, and stir until very hot, but being careful not to allow the mixture to come to a boil after the eggs are added. Place the hot asparagus on pieces of hot toast and serve the sauce in a boat.

SCALLOPED ASPARAGUS.

Cook the asparagus in slightly salted water until tender, then place in a buttered baking dish which has been slightly sprinkled with breadcrumbs. Dust the asparagus with grated cheese, chopped hard boiled eggs, salt and pepper and arrange layers in this way until the pan is full, having the last layer of asparagus. Pour over one cupful of thin cream sauce and allow it to soak through the mixture. Mix a little grated cheese with an equal amount of breadcrumbs, place over the top, dot generously with bits of butter and bake in a quick oven until highly browned.

Preparation of Vegetables for Cooking.

The careful cook pays much attention to the preparation of her vegetables for cooking. All roots, such as for instance, carrots, turnips, potatoes, etc., should be well scrubbed and carefully rinsed before any attempt is made to peel or scrape them. Cauliflowers, cabbages and green artichokes should all be soaked at least an hour in plenty of cold water, to which has been added salt or vinegar. If this precaution is neglected slugs and various small insects may be retained in the leaves. Carrots, unless they are very old, should be scraped as lightly as possible. So, too, should salsify. Apropos of the latter, which, from its peculiarly delicate flavor is known as the "oyster of the vegetable kingdom," each piece as soon as scraped should be at once placed in a bath of vinegar and water, with which has been mixed a little flour,

in order to preserve the color. It is particularly important that salsify should not be allowed to remain even for a moment out of water when once peeled.

Spinach is another vegetable that requires the greatest care in preparation and cooking. It must first be carefully washed, not only in one or two waters, but at least half a dozen, this being an absolute necessity because of the fact that spinach is always full of grit and only continued and thorough washing will eliminate it. Of course, the spinach should before washing be most carefully picked over and all damaged leaves removed.

A TIME WHEN LIVING WAS HIGH.

During the Franco-Prussian War, while Paris was besieged, the cost of living became fabulously high.

Fuel was a luxury and wood when procured, was of such quality that, had the ancient proverb-coiner watched it trying to burn, he would have hesitated to write, "there is no smoke without a fire." Coal and coke could not be obtained for neither money nor love.

A breakfast for two at a moderately priced restaurant, consisting of radishes and sausage, an entree made of apples, filet of beef with mushrooms, an omelette of three eggs, coffee and bread cost \$14.20; and all in small portions.

Butter cost from \$6 to \$7 a pound of a poor quality. Anything worth eating commanded \$12 the pound. Horse flesh was 60 cents a pound. A dog or cat cost \$4, a rat, crow or sparrow 80 cents. Venison was sold at \$2.80 a pound. A rabbit cost \$8, a fowl \$8, a turkey \$20. Eggs were \$1 each, cabbages \$3.20, potatoes \$7.50 a bushel and onions \$16 a bushel.

The proprietor of the English butcher shop (a Frenchman) supplied many strange dishes. He bought nearly all the animals from the zoological gardens at tremendous prices. For the elephants he paid \$5,400. Soon people dined on the flesh of elephants, wolves, cassowaries, porcupines, bears and kangaroos. These were often so cleverly disguised when served that they masqueraded as something quite different.

On New Year's day, 1871, the government made the city a gift, a magnificent one of beef, beans, olive oil, coffee and chocolate, perhaps with the intention not only of cheering the besieged but also for the purpose of exhausting their stock of provisions in order to capitulate with better grace. Strange as it may seem, there were few cases of actual starvation. The very young and the very aged suffered most, as milk, which was three-fourths water, sold at 40 cents a quart. Wine was always very plentiful. The French ingenuity and economy, which make use of every scrap and bone toward the production of a nourishing dish, is of inestimable value and is truly a national virtue.

IN PRAISE OF THE SARDINE.

The London *Lancet* in a recent issue places the stamp of approval on the sardine as a healthful article of food and submits its reasons.

The *Lancet* says: "Dietic authorities may well praise the sardine, since for one thing, it encourages the ingestion of oil, which, for a reason difficult to find, is very commonly excluded from the diet nowadays. A bland fat affords such an excellent physiological balance to nitrogenous foods that its reasonable use will help us to avoid many ills, and especially those associated with wasting diseases and gouty dispositions. It prevents the overloading of the tissues with nitrogenous waste products and a digestible fat favors nutrition considerably."

"The sardine supplies also an excellent proportion (25 per cent) of nitrogenous material, and so it becomes a real economical food. In addition to this the sardine has appetizing qualities, and where appetite serves digestion follows. Luckily, its preservation in the cooked state in oil precludes contamination, even though it is brought to our shores in the tin. We have examined a great number of samples of tinned sardines, but not once have we been able to find the slightest evidence of metallic contamination or of objectionable preservatives. The tins consist of no worse metals than iron and tin, both of which may be regarded as practically outside the pale of poisonous metals. Oil is, besides, an effective guard against these metals being attacked. Physiologically it counts for very little if the sardine proves to be not a 'scientific' sardine and the oil is not the oil of the olive."

WISDOM OF THE SERPENT.

Mrs. Reider (with paper)—I see that the big anaconda up at the zoo won't eat chickens unless they are alive.

Mr. Reider—Wise old snake! That's the only way to beat the cold storage game!—Puck.

The Milk Problem in Our Large Cities

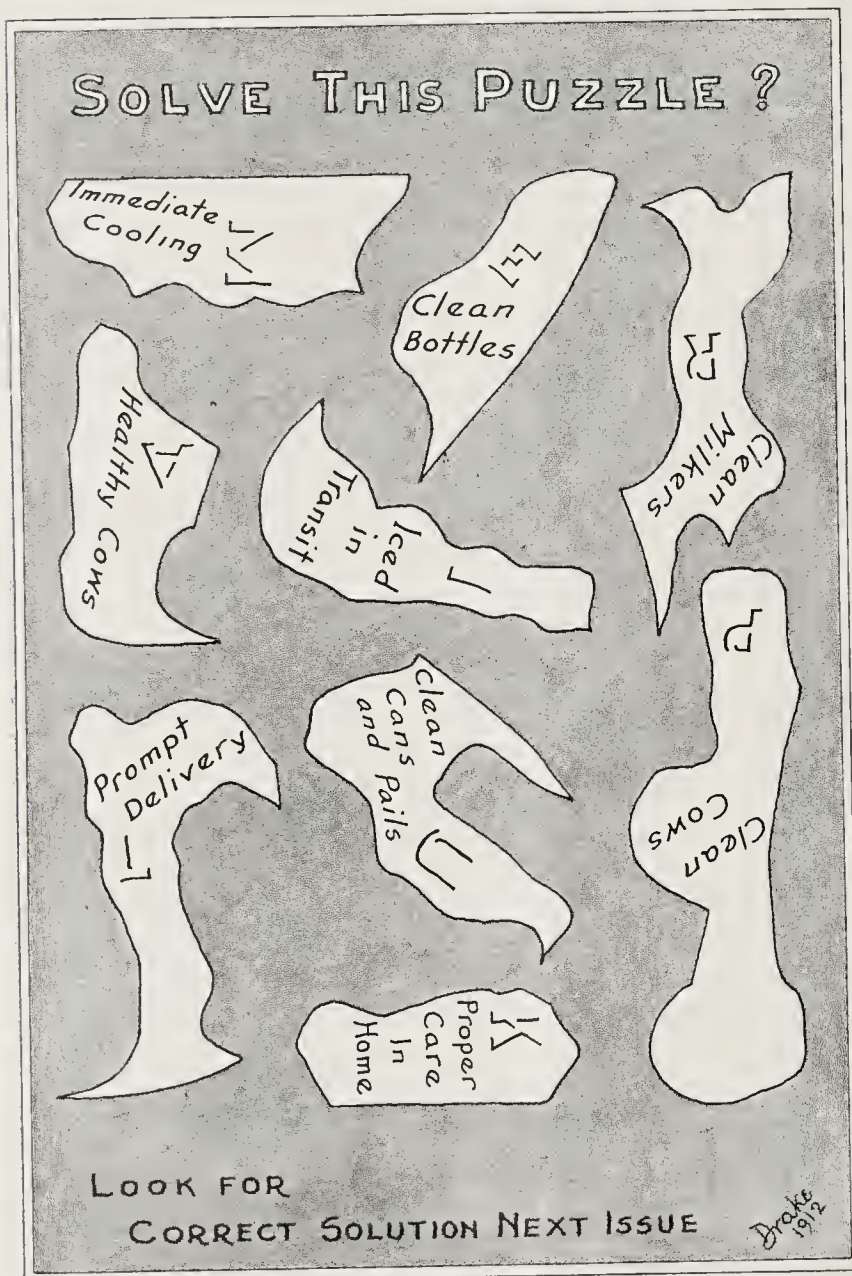
The accompanying illustrations are part of a campaign being made by the Department of Health of the city of Chicago to secure pure milk. At the last session of the Illinois Legislature an act was passed forbidding any municipality to pass an ordinance providing for the testing of cows furnishing a city's milk supply with tuberculin, and efforts to promote cleanliness and healthfulness of Chicago's milk supply are naturally along other lines. Pasteurization and rigid inspection are urged by Chicago's Health Department, and under an ordinance not very many years old all milk sold in the city must be delivered to the consumers in sealed bottles. This applies to local "dairies," delicatessen stores, grocery stores, etc., as well as milk concerns delivering to the consumer by wagon. The ordinance also prohibits a milk dealer from using the bottles of another dealer, so that a careful check may be kept. The puzzle pictures are the work of Dr. C. St. Clair Drake, of the Bureau of Vital Statistics of the Chicago Department of Health.

Nashville, Tennessee, has no ordinance providing for the sale of milk in sealed bottles, but according to Dr. W. E. Hibbett, Health Officer of that city, it sadly needs one. Dr.

have been afflicted with tuberculosis, scarlet fever or even worse diseases.

"The dangers from these milk tickets are multiplied by the habit of placing them in the bottles, where they may deposit the bacteria that are clinging to them.

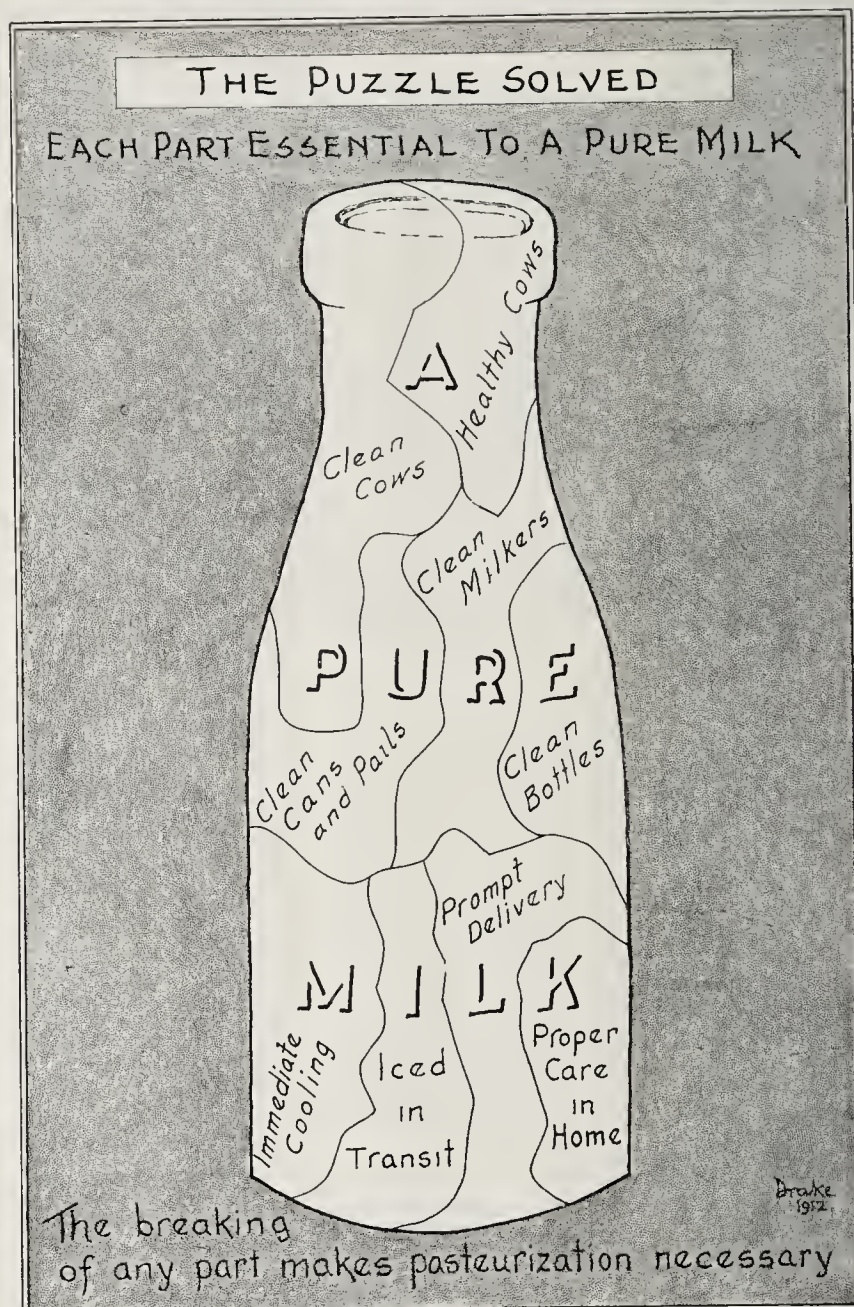
"Milk must not only be bottled, but should also be bottled at a bottling plant at the dairy. Many dairymen have a habit of carrying bottled milk and milk in cans in the same wagons.



Hibbett is a progressive on the milk question, as his recent utterance, quoted following, will show:

"We can never expect a pure milk supply until milk is sold only in sealed bottles, with the temperature kept down below 55 degrees to prevent the multiplication of bacteria. Some dairymen are doing this now, but others are not and are opposed to any legislation that would require them to do so.

"I want to caution the consumer against buying milk tickets, and the practice of putting them in the vessels to be filled. The consumer has no means of knowing where these tickets come from. The last person who used them may



As the empty bottles are collected they are refilled and sold again as bottled milk, without the bottles ever having been washed or sterilized. The refilled bottle may have come from a sick room, and may be the means of spreading the disease.

"I would also like to call the attention of consumers to their duty in regard to milk bottles. They should never return to the dairyman a bottle that has not been at least scalded and thus do their part in securing a pure milk supply for the city.

"Some dairymen are now sterilizing their bottles with live steam before refilling them. All should do so, but there is no way of securing this now except through the voluntary action of the dairymen.

"Then there is the question of 'dip milk,' which is sold from grocery stores, being dipped out from large cans with an old dipper or cup. Most of this milk is fed to the babies of the poorer people, and is responsible for a large part of the infant mortality. With a pure milk supply and proper attention to feeding, the infant death rate could be reduced from 25 to 50 per cent."

In his annual report to the Board of Health, Chief Food Inspector Blume of Cincinnati urges that all of the 3,500 dairies in Ohio, Indiana and Kentucky that furnish Cincinnati's milk and cream supply should be subjected to the

tuberculin test to determine whether any of the cows are afflicted with tuberculosis. He also urges the people to keep their milk cold at all times, to rinse and scald the milk bottles so as to get them perfectly clean, to pasteurize the milk at home, to always keep it covered and never to drink it if a fly gets into it. He submits a report from City Chemist Bahlman, stating that the milk in this city is comparatively free from bacteria, the only large cities excelling Cincinnati in this respect being Boston, Lynn and Haverhill, Mass. Most infantile deaths, he says, are due to impure and unwholesome milk. Cincinnati is fourth of nineteen cities in the low mortality of children under one year of age, showing a comparatively good milk supply since rigid inspection has been instituted. During the past year 285 dairies and seven milk depots quit business on account of the inspection, he says. He destroyed 8,000 gallons of milk last year for being sub-standard or of excessive temperature.

Dr. William H. Price, Chief Milk Inspector for the Board of Health, has found on investigation that 77 out of 110 restaurants in Detroit are selling "skimmed" milk in violation of the state and city pure food laws. The doctor found all classes of restaurants evading the law. The last inspection of the milk dealers and dairymen disclosed an adulteration of only two per cent, proving conclusively that the restaurant keepers do their own "skimming."

Dr. Price will extend his investigation of the milk supply to all the hotels and the drug stores that sell milk.

Dr. Hood, Chief Food Inspector of Montreal, has received the complaint of the Milk Shippers' Association of Quebec province, contending that while there was a good inspection of farms and dairies in that province such inspection was not as severe in the province of Ontario, where there were many shippers who were sending milk to Montreal.

R. M. Allen, head of the Food Division of the Kentucky Agricultural Experiment Station, has sent out notices to Indiana dairymen warning them that unless they improved sanitary conditions about their dairies they would be forbidden to ship milk into Kentucky.

REVIEWS OF LATE BOOKS.

Food for the Invalid and the Convalescent, by Winifred Stuart Gibbs.

The best thing that can be said for this book is a word of praise for its brevity and conciseness. It is a small volume and easily kept at hand for reference. A great many books of special menus have been published, but upon one and all the same comment may be made—they are too elaborate. They mean either the expenditure of too much money or too much time and expense. There has been for a long time a decided need for a book of few pages which shall concisely set forth simple, inexpensive menus from which the greatest amount of nutritive value may be obtained. This has been exactly Miss Gibbs' purpose.

(New York: The Macmillan Company; 75 cents net.)

The John Willy Hotel Directory.

John Willy is a sentimental gentleman with whiskers, who engages in the publication of hotel directories and newspapers when he should be bringing out books of poetry. Not that he does not do well as a hotel publisher. His inclinations merely are poetical. Being sentimental, he is serious, and he has made a serious and exacting duty of producing the most satisfactory hotel directory we have ever seen. There is no padding. Every line is information. There are 15,000 of the leading hotels in the country listed, and the traveler, upon whatever errand, may pick out his hotel while en route with the reasonable certainty that he will find it as listed in the John Willy Directory. The book is in a form that lends itself to easy carriage, in the valise or in the pocket.

(Chicago: The Hotel Monthly; \$1 net.)

The Cornice Work Manual, compiled by Sidney P. Johnson.

However little reason there may be for reviewing a work designed to enlighten workers in a mechanical trade in a publication devoted to foods and such, it is a pleasure to say a word in commendation of this manual, which has all the elements of completeness, accuracy and good organization. The book is issued by the *American Artisan*, one of the foremost technical magazines in the country, and is made up of articles that have appeared in its pages. The illustrations are numerous and illuminating.

(Chicago: The American Artisan Press; \$1 net.)

GROCERY MEN'S CONVENTIONS.

The sixth annual convention of the National Wholesale Grocers' Association in St. Louis on May 15, 16 and 17 will be an important gathering. Following closely the conventions of the Southern Wholesale Grocers' Association and National Retail Grocers' Association, the proceedings will take on the character of a resume of association work in the grocery trade.

The program includes reports of all the committees. Prominent among these are pure food, membership, discount, law and legislation, and tares. The report of the secretary will contain many practical suggestions. The pure food report will be a most important one, it is said.

On Wednesday, at the afternoon session, there will be addresses by John W. Lux, president of the National Retail Grocers' Association, and W. P. Cutler, state food commissioner of Missouri. In the evening there will be an entertainment at the summer garden by the St. Louis wholesale grocers. The morning session on Thursday will be devoted to a business meeting. In the afternoon Walter H. Lipe, president of the American Specialty Manufacturers' Association, and L. V. B. Cameron, president of the National Association of Brokers in Refined Sugar, will speak. In the evening the subscription banquet of the association will be held at the Hotel Jefferson.

On Friday S. F. Haserot, president of the National Canners' Association, and Joseph Kline, president of the National Canned Goods and Dried Fruit Brokers' Association, will be speakers. The annual election of officers will be held on Friday. There will be a theatre party in the evening.

The recent convention of the National Association of Retail Grocers went on record as favoring the Campbell bill in Congress providing for the labeling of foods sold in packages with the maker's name and address, and a national measure providing for net weight branding on all packaged foods, as well as the Leven oleomargarine bill providing for a reduction of the tax on oleomargarine and fixing its nomenclature. All of the former officers of the association were re-elected.

FOOD INSPECTION DECISIONS NOT LAWS.

Although in its opening statement [in the Mocha coffee case] the government referred to the decision of the Board of Food and Drug Inspection as having been "passed in pursuance of the statute," carrying with it the implication that it was a lawful regulation adopted under Section 3 of the Food and Drugs Act, and thereby having the same force and effect as if specifically incorporated in the statute itself, the fact is that the opinions or decisions of the Board of Food and Drug Inspection of the Department of Agriculture do not add anything to nor take away from the rules and regulations. They merely express the attitude of the Department of Agriculture in relation to the interpretation of the law and the rules and regulations, and they are published for the information of the officials of the department who may be charged with the execution of the law, and especially to acquaint manufacturers, jobbers and dealers with the attitude of the department in these matters, and are issued more in an advisory than in a mandatory spirit, so that in case the opinion of the department is not that of the manufacturer, jobber or dealer there is then no obligation resting upon the manufacturer, jobber or dealer to follow the line of procedure marked out or indicated by the opinion of the department. Each one is entitled to his own opinion and interpretation and to assume the responsibility of acting in harmony therewith.—*The Spice Mill*.

FOODSTUFF PRICES SOAR UPWARD.

Prices on foodstuffs are on the upward ascent again. The climbers are potatoes, lamb, beef, flour and eggs, which are starting on the bottom rung.

The wholesale price on potatoes was quoted yesterday at \$1.25, an advance of 20 cents over last week's price. The "murphys" were retailed to the consumer at 35 cents a peck, or \$1.40 a bushel. Flour was selling wholesale for \$6.50 a barrel. Lamb and sheep were selling at \$9.50 and \$7.65 a hundredweight, while beef brought \$9.05 a hundredweight at the stock yards.

The retail price of meat varied in different parts of the city, being low on the South Side and higher on the West and North Sides. The average price asked for the different kinds of meat yesterday were: Round steak, 19 cents; sirloin, 25 cents; shoulder of beef, 18 cents; lamb chops, 25 cents; pork chops, 19 cents, and loin, 17 cents.

While the price of eggs remained unchanged yesterday, there was a scarcity in the market and dealers predicted a rise within a few days.—*Chicago Inter Ocean*, May 8, 1912.

Survey of the Food and Drug World

Large Biscuit Concern in New Hands.

The Loose-Wiles Biscuit Company, the second largest concern of its kind in the United States, with factories at Minneapolis, Kansas City, Chicago, St. Louis, Boston, Omaha and Dallas, was taken over on May 1st by a syndicate headed by William Salamon & Co., of New York and Chicago.

The name of the company is not to be changed. J. L. Loose and J. H. Wiles will remain in the company and the capital stock is to be increased to \$15,000,000. The deal is said to have been decided upon because of the success of the Boston plant of the concern, and the new capital is to be used for increasing the capacity of the Boston plant and for the purpose of establishing other factories in the east.

The officers of the Loose-Wiles Company are: President, J. L. Loose; Vice President, J. S. Loose; Secretary-Treasurer, J. H. Wiles. L. F. Swinney, President of the First National Bank of Kansas City, and L. E. Clark of the Interstate National Bank of Kansas City, are directors. Mr. Wiles is in Chicago and President Loose is in Boston.

The present owners will receive about \$5,000,000 for their interests. It is said that they will reinvest part of this in the stock of the new company and the management will remain essentially as it is now. The names of the officers will be announced soon. It is understood Jacob L. Loose is to be president of the new company. J. S. Loose will retire. He is now in Europe with his family. John H. Wiles probably will be secretary or treasurer of the new company.

Within the last eight years the gross sales of the Loose-Wiles Biscuit Company have increased 375 per cent, it is stated. More than 35,000,000 packages were sold in 1911, amounting to \$11,000,000, while the company's earnings were \$583,000. The Loose brothers in 1882 started a cracker factory in Kansas City. It was known as Loose Bros. Manufacturing Company. In 1890 they sold out to the American Biscuit Company, which in 1898 was taken over by the National Biscuit Company. In 1902 Mr. Loose and his brother, J. L. Loose, started the present Loose-Wiles biscuit plants.

Sometimes Sparrows Masquerade as Reed Birds.

The Department of Agriculture has issued a comprehensive pamphlet on the English sparrow, condemning him as a harmful pest, and concluding with a number of recipes of his preparation for the kitchen. Most of the pamphlet is devoted to demonstrating the harmfulness of the sparrow and telling how to kill them.

"English sparrows," says the report, "are noisy, filthy and destructive. They drive native birds from villages and from homesteads. Though they are occasionally valuable as destroyers of noxious insects, all things considered, they do far more harm than good. Practical methods of dealing with them include destruction of nests, shooting, trapping and poisoning. Of these trapping is unquestionably the best. English sparrows are food to eat and their use as food is recommended because of their nutritive value and as a means of reducing their numbers."

In specifying methods of preparation for the kitchen the bulletin gives the following directions for dressing the little culprits:

"Cut off the legs, the wings at the outer joint and neck close to the body; strip off the skin, beginning at the neck; make a cut through the body wall extending from the neck along the backbone till the ribs are severed, then around between the legs to the tail, and remove the viscera. Sparrows may be cooked by any one of the methods employed for reed bird and quail."

Argentine Frozen Meat in Netherlands.

An illustrated pamphlet has just been published by the manager of an Amsterdam warehouse company regarding the desirability of importing frozen meat from Argentina—a subject which has been much discussed in the Netherlands lately.

The pamphlet considers the climate, pastures, methods of breeding, and sanitary conditions generally relating to the slaughter of cattle and the treatment of beef in Argentina, all the conclusions being favorable. It reasons that Argentine frozen meat has the same feeding value as Dutch meat, and is much cheaper, therefore answering the needs of the poorer classes who can not buy Dutch meat. The pamphlet

says that while Argentine beef can be delivered, import duty and all other charges and expenses paid, at Amsterdam meat shops for 9 cents (United States) a pound, the dealer here pays at the Amsterdam abattoir between 17 and 18 cents a pound for first quality Dutch beef, 14½ cents for second quality, and 12 cents for third.

It is claimed that imports of frozen meat would not affect the prices of Dutch beef, as the former would be eaten by people who now use horse flesh or no meat at all.

Increased Food Inspection in Iowa City.

The inspection of meat markets, bakeries and establishments where foods are sold will be undertaken by the city of Des Moines, Iowa during the summer. The milk inspector, now drawing a salary jointly from the state and the city, will be appointed food inspector and his duties will be increased to include supervision of all foodstuffs and stores where foods are sold.

Committees from the social service board have requested the City Council to provide for inspection of foods and compel the proprietors of establishments to adopt clean methods in the manufacture of bakery goods. They reported instances of the smaller concerns in which goods are manufactured in an unsanitary manner.

The permission of the state to allow the milk inspector to be appointed food inspector in the city has been granted by W. B. Barney, state food and dairy commissioner. He urges the City Council to proceed along these lines by the adoption of ordinances by the City Council making inspection as rigid as possible. If the state law does not give the city the proper powers, he urges the city to request wider powers at the next meeting of the legislature.

Possible New Breakfast Foods.

An American breakfast food manufacturer is in Hawaii investigating the taro plant with the view of putting on the market a new food product made therefrom. Taro is a popular name for *Golocasia antiquorum*, and especially for its variety *esculentum*, a tropical plant, grown in the islands of the Pacific, where it forms a principal food. Its starchy, stemlike tuberous root is now boiled or baked, made into bread or into poi, a fermented product. The young leaves and tender leaf stalks are used, respectively, like spinach and asparagus.

Cassava, or mandioc, another starchy tuber, which grows abundantly in tropical America, might also prove valuable for conversion into breakfast foods. Cassava has long been sold in flaked form in India.

Bananas and plantains are also now flaked and crisped, samples of toasted plantain flakes from the Dominican Republic being among the exhibits at the Bureau of Manufactures in Washington.

New French Meat Regulations.

By a Presidential decree of February 6, 1912, the regulations governing the admission into France of fresh meats are changed as follows:

"The importation in separate pieces of the following kinds of meat from the bovine species is permitted: Tenderloin and sirloin; rounds and rumps; which shall bear no signs of having been trimmed—they may be presented either separately or attached to each other; tongues, which shall bear no signs of having been trimmed and which shall be presented with the pharyngeal walls, the retro-pharyngeal and the sublingual lymph glands adhering naturally, as well as the larynx, and about a third part of the trachea; kidneys and brains, and sweetbreads. The importation of kidneys and brains of sheep and hogs is permitted.

"The foregoing should not be construed as prohibiting the incising of glands and parts, without removing any part of them, to determine the presence of disease."

Candy Testing Laboratory in Pennsylvania.

With a view of raising the standard of purity in candy made in Pennsylvania a large laboratory will be built in Pittsburgh by the Pennsylvania Manufacturing Confectioners' Association to test all materials used in the confectionery industry. The association is a state-wide organization, repre-

senting millions of capital, and comprises 208 manufacturers, all the leading firms in Pennsylvania being represented.

Seven months ago when the association was formed a purchasing committee was appointed to pass on all materials used by the members. To this end the organization offers standing rewards for any harmful adulterants, dyes, etc., found in candy, and is pledged to assist the state food authorities in their prosecution of confectioners and others who used harmful ingredients in their product.

In order to carry on the scope of its work properly it was often found necessary to make laboratory tests by expert chemists and up to this time the association has been having its analytical work done by private concerns. William Hardie, of Hardie Bros. & Company, of Pittsburgh, chairman of the association, is making every effort to have a suitable laboratory erected, and in this enterprise is being encouraged by the Industrial Development Commission.

The Shellac Eugaboo in North Dakota.

Prof. E. F. Ladd, pure food commissioner of North Dakota, published a statement in regard to cheap candy in his March bulletin, which is as follows:

"Of late there has been considerable complaint with regard to some of the cheap candies, and it has been found that some of these candies contain arsenic, either in connection with the material used in the preparation of the glucose as acid, or in the colors, or, at times, in the shellac which is used as a coating upon the surface.

"Now all shellacs are prohibited from use on candies in North Dakota, and the public would do well to be careful as to the kind of candy which they purchase, so that there shall be no danger of poisoning from cheaply made products of this kind."

Rejected Formosa Teas Cannot Be Blended.

Secretary MacVeagh of the Treasury Department has made the following ruling on the proposal of certain New York tea importers to mix rejected Formosa teas of low grade with other teas of higher grades to fit them for importation under the standards of the Tea Board:

"The department has decided not to grant the request of various importers of Formosa teas, that they be permitted to blend certain teas that have been rejected with other teas of higher grades for the purpose of raising the rejected ones up to a sufficiently good quality to pass the required examination.

"The department is convinced from the informal report of the chairman of the Tea Board and the other members of the board who assisted him, and also from independent inquiries, that there is no ground for any criticism of the action of the tea examiners in their original rejections, most of which were sustained by the Board of General Appraisers on appeal."

Cheap Oranges in China.

Consul General Roger S. Greene, Hankow, writes: "The oranges eaten by the Chinese here are practically all grown in China, and most of them in places near enough to market to make possible transporting them without special precautions. Prices of oranges vary greatly according to the kind, quality, and season of the year. At present (mid-February) Szechwan loose-skin oranges (mandarins) sell at the equivalent of about 44 cents gold per basket containing about 175 oranges, while the tight-skinned variety from Canton sells for the equivalent of 67 cents gold per basket of 100 oranges."

May Store Meats With Cheese.

In a recent announcement the Federal meat inspection authorities notified inspectors to refuse to permit the storage of meats in rooms permeated by odors not common to the meats and meat products, and which they might absorb. The regulation is now modified to permit storage near products which are edible and fit for human food, such as cheese, and inspectors are asked to report cases where such odors do exist, and their opinion as to whether such odors render the meats objectionable or the inspection more difficult. It is presumed that discretion will be used in permitting storage in such cases, according to the circumstances.

Missouri Commissioner Urges Bad Egg Law.

In the annual report of Dr. W. P. Cutler, Food and Drug Commissioner of Missouri, published in April, there is a strong recommendation for the enactment of a law fixing a severe penalty for the sale of stale or bad eggs. Dr. Cutler believes the rigid inspection of dairies has raised the standard of cream fully 50 per cent. By co-operation with the state veterinarian the dairy commissioner is advised of cows condemned for tuberculosis and action, Dr. Cutler says, is immediately taken to prevent the sale of milk from such

cows. Dr. Cutler recommends an amendment to the law empowering the commissioner to appoint three drug experts instead of one to prevent the sale of inert drugs.

Maryland Regulation of Use of Saccharin.

State Food and Drug Commissioner Charles Caspari, Jr., of Maryland has issued the following bulletin on saccharin under date of April 11, 1912:

"In conformity with a regulation of the State Board of Health adopted April 1, 1912, the State Food and Drug Commissioner will regard as adulterated under the food and drugs act of Maryland, Chapter 156, Acts of General Assembly of 1910, foods containing saccharin which on or after May 1, 1912, are manufactured for sale, produced for sale, exposed for sale or sold within the state of Maryland.

"The food and drugs law of Maryland provides that any substance which is intended to be used for the prevention, cure or mitigation of disease is a drug, and hence a product containing saccharin if plainly labeled to show that the mixture is intended for the use of those persons who, on account of disease, must abstain from the use of sugar, falls within the class of drugs and is not affected by this regulation."

Olive Oil Adulterator Gets Prison Term.

The first prison sentence imposed in New York for a violation of the Federal pure food law was meted out to Gaetano Marchesini, a vegetable oil importer doing business under the firm name of Marchesini Brothers, at 585 Washington street, by Judge Holt in the United States District Court. Ten days on Blackwell's Island and \$300 fine was what Marchesini got when convicted of misbranding and adulterating cotton seed oil which he sold as pure olive oil. Marchesini has pleaded guilty twice before to similar offences and fines were imposed. That form of punishment did not appear to act properly as a deterrent and accordingly Assistant District Attorney Smith demanded a prison sentence.

Work of Indiana Food Department.

Fourteen places were condemned in Indianapolis during the month of March under the order of the pure food inspectors of the State Board of Health. The list included two bakeries, one confectionery, four dairies, one fish market, three groceries, two meat markets and one slaughter house. One hundred and twenty-nine analyses of foods were made in March, of which eighty-six were found to be legal and forty-three illegal. Five out of seven temperance beers examined were illegal; four out of eleven samples of lemon extract; eight out of twenty-two samples of butter; eleven out of fifty samples of milk; three out of five syrups and four out of five canned fruits were illegal.

Food Leaving Cold Storage in New York.

The State Department of Health announces that most cold storage plants in New York have complied with the provisions of the Brennan cold storage law, prohibiting the storage of food longer than ten months. The time limit expired on April 15, and prosecutions will be begun against those places where violations were found. The department also has begun an inspection of all retail places in the state which handle cold storage goods, and expects to "undertake prosecutions where cold storage foods are sold as fresh goods."

Texas Commissioner After Insanitary Conditions.

Pure Food Commissioner Abbott of Texas gives out word that grocers had better protect the wares they offer for sale from the flies. He is making investigations and several deputies are likewise on the still hunt for offenders against the state's pure food requirements. They are not only after bad butter and the light-weight butter, but also they are hunting down those grocers who permit flies to walk over their goods offered for sale.

Ghee, the Dried Butter of India.

In India, butter is treated so that it never becomes stale and may be kept fresh for a hundred years. The butter is boiled till all the water and curds are got rid of and nothing remains but clear oil. When the oil cools into a solid it is granulated, and in this form will remain fresh indefinitely. This is what they call ghee, and ghee is nothing more or less than dried butter.

New York Eats Billion Eggs.

Figures gathered by the marketing committee of the New York State Food Investigation Commission show New York City each year consumes between 1,296,000,000 and 1,440,000,000 eggs, of which 319,800,000 are from cold storage. Each week the inhabitants eat 1,350,000 pounds of butter. Cheese consumed last year was 30,000,000 pounds.

What the Other Fellow Thinks

Trouble in Store for Dr. Wiley.

Mr. Henry Beach Needham contributes to the *Saturday Evening Post* of May 4th a readable interview with Col. Roosevelt, largely in the form of a dialogue between the writer and the Colonel. In the course of it, the two get around to the pure food question, which is treated and disposed of in the following fashion:

"And the people's law—the Pure Food and Drugs Act—has that been enforced primarily in the interests of its intended beneficiaries—every man, woman and child?"

"'Dr. Wiley's resignation,' said Mr. Roosevelt, 'answers that question.' As he says in print he resigned because 'the situation had become intolerable,' because 'the fundamental principles of the Pure Food and Drugs Act had, one by one, been paralyzed and discredited.'"

"'I regard the pure food law, with the meat-inspection act, as one of the great achievements of my administration. It was my earnest endeavor to enforce that law with fairness to food manufacturers, but without favor to those engaged in misbranding or adulterating foods and drugs.'"

This, if suggestive of anything, would seem to indicate knowledge on the Colonel's part that the secret of Dr. Wiley's resignation is to be found in the fact that the Colonel is no longer President and that, after a three-years' trial, Dr. Wiley has given up as hopeless the task of inducing the Colonel's successor to regard the pure food act with the same reverence that the Colonel always evinced for it.

Unfortunately for the beneficial effect to the Colonel's and the adverse effect to Mr. Taft's candidacy that such a conclusion would result in, the *New York Evening Telegram* unkindly chooses to come along at this particular juncture with the following comment of its own and quotation from Old Dr. Wiley himself on this very question:

"It often takes time for the truth to come out. One thing the public has waited long and patiently for is to learn why Dr. Wiley, in whom it had faith, was overruled by the food adulterers.

"Dr. Wiley regards the appointment of the Remsen Board, which reversed the ruling that benzoate of soda was harmful in food products, as the hardest blow ever dealt the pure food law. Asked if he would tell about the origin of the Remsen Board, Dr. Wiley replied:

"'Why, I guess so. I wore a muzzle becomingly for a long time. Perhaps the truth ought to be told about that board right now. It was appointed by Mr. Roosevelt as President of the United States, either on the suggestion to him of the Secretary of Agriculture or by his own suggestion to the Secretary. The actual announcement was made by the Secretary of Agriculture.'"

We are afraid there's trouble in store for Dr. Wiley. The Colonel's temper, none too amiable to begin with, has not been sweetened by his experience in Massachusetts, where Mr. Taft began the sacrilegious practice of telling the other side of some of the inside workings of the Roosevelt administration. There's danger that the Colonel will get "plumb peeved" now that Dr. Wiley shows such indecent haste to follow suit.—*Louisville Times*.

It Won't Work This Time.

A weekly magazine which makes a business of tearing down the reputations of public men in order to build up its own circulation has been printing a series of attacks on Secretary of Agriculture James Wilson. It has expressed the intention openly of driving Secretary Wilson out of President Taft's Cabinet. Because another Cabinet member once resigned following a similar series of attacks, the managers of this magazine may think they can achieve a like result in Secretary Wilson's case.

It is probable that they have barked up the wrong tree in this instance, however. Secretary Wilson is not made of the stuff that retires under the fire of mud batteries, and the President is not at all likely to encourage him to take such a step. A lot of people with sore heads have been trying for a long time to retire the veteran head of the Department of Agriculture from public life. Their grievance is that the Secretary prefers to run his own department, and that he has no use for demagogues or wire-pullers. They don't like his Scotch pertinacity; it has been too much for them every time they have run up against it.

The Secretary has already broken all records for occu-

pancy of a Cabinet position, and he is still distinctly on the job. He has built up the Department of Agriculture to be one of the most valuable—if not the most valuable—of all the government departments to the people at large. And the people know it. The current attack on his record has fallen flat.

This is not surprising, considering the Secretary's strength with the people, as well as the weakness of the indictments. They are manifestly "made to order," and most of the counts in them have already been discounted or disproved. The articles are written by a Washington newspaper correspondent who has long nursed a personal grievance against the Secretary, and who is known as the press agent of one of the Secretary's bitter enemies. They are published in a magazine which has been noted for this sort of thing ever since it painted up photographs of packinghouse interiors to make them look dirty.

When Secretary Wilson gets out of the Cabinet he will get out because he is through, and not because he was driven out by professional mud-slingers.—*National Provisioner*.

Apple Pies for Japan.

A consular report calls attention to the fact that the Japanese, having imported apple trees from the United States, have been supplying the large city markets for twelve years from the orchards of Hokkaido and the northern provinces of Akita, Aomori and Yamagata, but that, although they raise the fruit successfully, they don't really know what to do with it.

Apples are used for afternoon teas and they are given to the children to eat between meals, but the Japanese have not learned to cook them.

Probably this is just as well. The Japanese have been exhausting the marvels of occidental civilization and it is well to leave a few fields unexplored for a while, but the time is coming when apple pie, apple sauce, apple fritters, apple rolls, apple dumplings, baked apples, etc., must be introduced to them.

We cannot spare many old fashioned pastry cooks from this country, but we might let Japan have a couple as a loan on promise to return them in a year or two. We could not in justice to ourselves, spare more than two or three, but as a friendly act to a friendly power we might let Japan have the use of a few until a school of pie cooking had been put on its feet.

An international friendship established on apple pie, on the genuine apple pie with crisp crust and spicy, juicy interior, might be durable and lasting. But we cannot spare many cooks.—*Chicago Tribune*.

The Canning Industry and Living Standards.

A famous writer on stock market doings states, in connection with comment on the rise in American Can shares, that "The high cost of living is due largely to the great consumption of tin cans, but people like to be goats and there seems to be no limit to the growth of the business." At last we have it. The cause of the higher cost of living is out, revealed by a stock market analyst. The canning industry has been a factor in reducing, rather than raising, the cost of living. It has, however, raised the *standard* of living, and in so doing has raised the average health of the people by providing them with an endless variety of fruits and vegetables, in a condition very closely approaching the fresh state, the year round.—*The Canner*.

Suicide Enforced by Law.

This journal has always insisted that both state and federal laws go too far in construing almost any sort of an agreement between men in the same business as a trust. Desirable as it is to safeguard the public against the impositions of combinations, it should be no part of public policy of state or nation to see that destructive competition is maintained and business ruined.

No other civilized country takes such a view of its duties to the people. Almost anywhere outside the United States, for instance, millers are free to arrange a reasonable basis of competition. They can fix a minimum price, for example, below which flour shall not be sold, so long as that price is a fair and reasonable price. In the United States, however, if millers should agree to sell flour at cost or below cost, it would be an indictable offense, though the public would receive the benefit of such an agreement. The attitude of state and nation is that the agreement is wrong, *per se*, even if it results in a public benefit, while on the other hand competition must be maintained even if it be so destructive that in the end it raises prices.

It is noteworthy that jurists are beginning to veer away

from the old anti-trust ideas. According to a former United States judge, there are now, for instance, two views of the Sherman law. He states them as follows:

First. The old theory that any arrangement between business men that takes them out of the relationship of active competition between themselves is a violation of the act, even though such competition is financially suicidal to them and even though the result of such competition is higher prices.

Second. The theory that such arrangements between business men are not within the act unless it results in or has in view unfair tactics against other competitors or results in or has in view some injury to the public in the way of higher prices.

Evidently the Supreme Court of the United States leans towards this second and more rational view; a view more in accordance with genuine liberty. Unrestricted competition has done illimitable mischief to the milling business of the country. It has closed hundreds of mills. May the days of such destructive competition speedily pass. Meanwhile, the only recourse is for every miller to know, at least, what his goods cost him.—*American Miller*.

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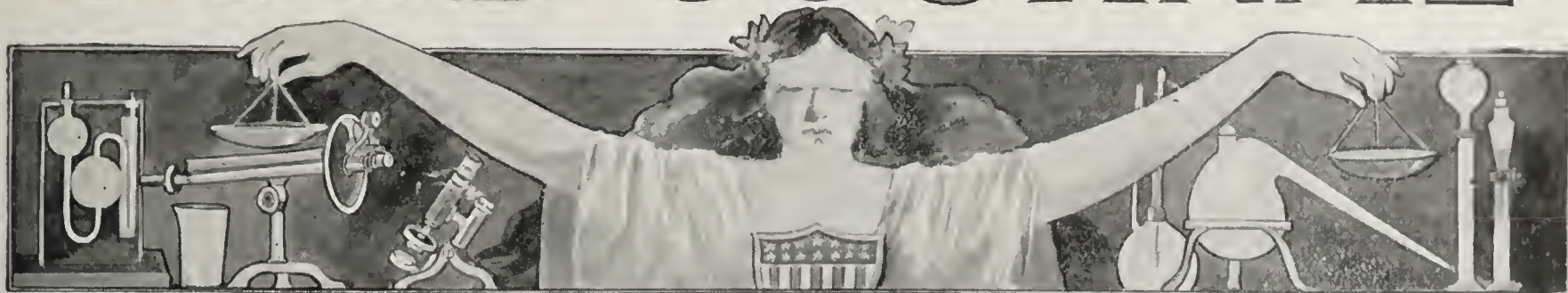
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Enforcement of State Food Laws

V. Work of the Food Commissioner.

By H. R. Wright, Former Dairy and Food Commissioner of Iowa.

Notwithstanding the expressive wording of the titles of various commissioners whose reports previous articles have reviewed, the idea is widely prevalent that their work is wholly in regard to the enforcement of the food law. Nearly every food commissioner, especially in the northern states, is a dairy commissioner as well, even in his title. In such states as Wisconsin, Minnesota and Iowa the dairy commissioner part of the duties equal or exceed those connected with the general food law. It is easy to understand that the commissioners of these great dairy states should be charged with the enforcement of the oleomargarine laws, but it is not so easy to make the public comprehend that the commissioners' dairy duties in these states have to do very largely, not alone with the enforcement of laws against spurious dairy products, not alone with the enforcement of a few sanitary laws or milk inspections laws, but that they have to do with the fostering of a great local industry; that the commissioner is not only a prosecutor of evil doers in relation to true and counterfeit dairy products, but that he is a guardian, a teacher and a promoter of the industry indicated.

It is not so difficult to understand that the commissioners' duties in some of the older states, in states having large cities, should be particularly in relation to that universal food, milk, and that a large part of his work, as shown by prosecutions and inspections, is directed at that product.

In a good many states, it is a matter of convenience and economy for the food and dairy commissioner, and his inspectors and deputies and chemists, to enforce various other laws, either with the object of

easily making inspections and certain prosecutions of evil doers, or with the object of fostering the industry in question. Sometimes such duty is expressed in the titles but more often it is not, and the general public does not know that such activities are demanded of the commissioner.

In the following states the title of the official having the direction of the enforcement of food laws is State Dairy and Food Commissioner, namely: Minnesota, Michigan, Wisconsin, Ohio, Connecticut, Oregon, Utah, Iowa, and in Pennsylvania the title is similar, namely, Department of Agriculture, Dairy and Food Division. In New York the food work and the dairy work are sub-departments in the Department of Agriculture. In Illinois, the State Food Commissioner is the head of the usual department. In Massachusetts, the food and drug inspection is a part of the work of the State Board of Health. In Tennessee the department is known as the Food and Drug Department, and South Dakota and Missouri have similar titles. In North Dakota the Agricultural Experiment Station, Food Department, is the official designation, and the State Board of Health in Indiana has general charge of the food work.

It is understood, of course, that most of these titles do not at all represent all the work of the various departments. In most of them the word Dairy comes first, which quite certainly indicates that the laws when passed were intended to apply especially to dairy products and dairy manufactures. Practically every state has a separate law relating to adulteration of milk, and nearly all of them have separate laws relating to oleomargarine and filled cheese, these being

in addition to the general food law which also applies to these products.

Minnesota employs one cheese inspector, ten creamery inspectors, six food inspectors and three herd and barn inspectors. This state expends upon the department \$58,465, and collects in fines \$5,483, and in milk licenses, \$3,533. In addition to effective enforcement of the laws, this state department inspects the creameries and cheese factories of the state, holds numerous educational dairy meetings, compiles dairy statistics, holds an extensive monthly educational butter and cheese scoring contest, and enforces laws regulating the canneries of the state, and laws relating to the sales of linseed oil, white lead and mixed paints, and insecticides.

The report of the Michigan department shows eight regular and six special inspectors, expenditures of \$48,579 and receipts of \$3,600 for registration of creameries, etc., \$6,620 fees on concentrated commercial feeding stuffs, \$1,527 milk dealers' licenses and \$1,815 ice cream manufacturers' licenses. Besides doing a large amount of work in the way of collecting and analyzing samples of foods, this department had two inspectors working exclusively upon inspections of bakeries and confectioneries, inspected the creameries and cheese factories of the state, held numerous dairy educational meetings, held an educational scoring test for butter and cheese, organized numerous cow testing associations, devoted the whole time of one inspector, and part of the time of several others, to the inspection of concentrated commercial feeding stuffs, inspected a considerable number of apiaries, and made numerous inspections of farm dairies and city milk supply stations. As previously noted this department made 126 prosecutions for sale of adulterated milk and fifteen upon all other adulterated foods.

Wisconsin's report shows one chief food inspector, one food inspector, five creamery, dairy and food inspectors, and as many cheese factory, dairy and food inspectors. Disbursements are \$45,907. A vast number of creamery and cheese factory inspections are reported, together with farm and barn and city milk inspections. Voluminous dairy statistics have been collected and compiled. The department enforces specific laws relating to the adulteration of malt liquors, linseed oil, turpentine, white lead and linseed oil compounds; also a sanitary law.

The Ohio department expends approximately \$45,000 upon the general work of the department and about \$30,000 on collection of liquor taxes. The commissioner is the State Sealer of Weights and Measures, and enforces laws relating to drugs, linseed oil, white lead, paints, turpentine, a sanitary law, and makes numerous dairy and cannery inspections.

Illinois lists twelve food inspectors and six stock food inspectors, and shows expenditures of \$72,301. This department, notwithstanding the fact that the word dairy does not appear in the official title, has given large attention to the creamery, cheese and milk condensing and milk distributing agencies of the state. As suggested in the statement of the number of inspectors, very considerable work has been done in the inspections and regulation of the sale of commercial feeding stuffs.

Connecticut expends \$15,927 annually, which does not include any chemist or laboratory expense, and enforces a drug law as well as a general food law.

Pennsylvania expends \$79,661 in the year 1910 and collected almost an equal amount, \$79,697, for oleo-

margarine licenses, and \$30,405 in fines, of which latter sum more than one-half was for oleomargarine fines. Pennsylvania is one of the greatest dairy states and the attention to dairy matters is correspondingly large.

Iowa employs one state dairy inspector, four assistant dairy commissioners, five food inspectors and one assistant commissioner and food inspector. Specific laws in relation to paints, linseed oil, turpentine, commercial feedings stuffs, condimental stock foods and agricultural seeds occupy the attention of the commissioner. The department does a great amount of work of an educational nature among the creameries of the state, issues licenses to 2,600 operators of the Babcock test; expenditures for the dairy work approximate \$18,000 and for all other purposes about \$30,000. This department collects \$6,500 from operators of the Babcock test, \$2,100 for milk licenses, and about \$18,000 from sale of license tags for commercial feeding stuffs, and for licenses issued to manufacturers of condimental stock foods.

In some of the smaller western states the duties imposed upon the food commissioner are even more numerous and as little related to the food work as some of the matters set forth above, such as the inspection of horticultural products, or the inspection of illuminating oil, but the foregoing list will show that only a portion of the time and activity and money expended in most of the states is directed to the food work. In most of the dairy states the food work is less than half the work of the respective departments, and in other states either a similar situation obtains or the food department is correspondingly small.

It is difficult for a commissioner to report that "Food products loaded with poisonous or deleterious chemical preservatives have been almost completely driven from the * * * market," and then ask for increased appropriations for additional prosecutions. On the other hand it is easy to make a showing on other inspection and regulating work that should be done; it is easy to point to possible results to be obtained from the boosting of a local industry and so it comes about that state legislatures, not at all impressed with the hysteria of the sensational press, and interviewing the commissioner in his sanest moments, is not impressed with the alleged necessity of additional extraordinary appropriations for prosecuting food work that does not appear in any of the *official* utterances of the commissioners. Hence it comes about that the real food work of the various departments of the states, is a long way from being the whole of the commissioner's duties. As previously shown more than 30 per cent of all prosecutions, and I am sure an equal proportion of all food work done is upon the single food, milk; and another large portion of the work is upon oleomargarine. There is no way to separate or accurately estimate the relative amount of money expended upon or the proportion of the activity of each department that is directed toward the foods of the people, but in those states where the department includes a large number of subjects besides the dairy and food work, it is safe to say that less than half the money and work is put into food inspection and food prosecutions.

Every food commissioner is constantly suggesting larger appropriations and more men to do the work of the department, but in most cases when he gets them he directs their activities to some more or less related subject. If one were to search the reports of the commissioners published ten or even five years

ago he would scarcely find dried fruits, bleached flour, oysters, ice cream. Every commissioner is constantly interested in an attempt to find something new to do so that he may make good with his public. What special reason is there why commissioners for many years ignored sanitary production and manufacture of food, and just now all of them are engaged in desperate efforts to have enacted, for themselves to enforce, strict sanitary laws? One reason is quite plain, at any rate. Every one of them is engaged in a laudable effort to make his department of real service to the public and he cannot satisfy his conscience with numerous prosecutions on baking powder not labeled in the right kind of type, or upon articles of food which are "misbranded" only by a strained or technical application of the law. He wants to do some real service for his people and he sighs for new worlds to conquer, and the sighing comes because he has conquered the old ones.

This writer believes that the user of harmful chemicals, that the seller of dirty and filthy and unwholesome foods, should be prosecuted vigorously whenever and wherever detected. He believes that the seller of any real adulterated food, even if it only affects the pocketbook of the buyer, should be prosecuted sufficiently to make him change his dishonest practice to an honest one. He further believes, whatever may have been the situation ten or twenty years ago, that the food situation of this country is vastly improved, that it is in mighty good shape, that the consumer is as well protected against unwholesome foods as he is, for example, against theft of his property, and that he is fairly well protected against slight cheats in misrepresentation of the foods he buys. He believes that this confidence is shared by the judges that have imposed only trivial fines upon convicted violators of the federal statute, fines which do not represent one per cent of the expense attending the detection and prosecutions. He believes that this confidence is shared, *officially*, by the food commissioners who practically so state in making official reports claiming effective enforcement of food laws by themselves. This writer is unable to understand the attitude of some of these same people who talk very differently at conventions and before women's clubs, because to claim effectiveness in the enforcement of the laws is the highest self praise for the man charged with such enforcement, and to rehearse some of the horrifying fables which allege the contrary is the deepest self condemnation.

There is nothing in the amount of money spent by the states upon food work, there is nothing in the number of detected violations, there is nothing surely, in the number of successful prosecutions, there is little in the character of these cases, there is nothing in the *official* reports of the commissioners of the states, to indicate that the foods of this country are very much adulterated, or dangerously adulterated even in a small degree. The propaganda carried on to make reputations for a few impractical and egregiously egotistical food chemists, so far as it relates to present facts, is wholly upon a false basis.

As heretofore suggested, to hold the contrary, is to say that the food commissioners of this country are not competent to get results, that they have failed in their respective duties, and I am one of those who hold that they are active and eager for the public good and that they get all the results that the facts of the food situation permit them to achieve.

The country, nevertheless, needs the food departments as much now as it ever did, for exactly the same reason that a city needs policemen even where no arrests are made. It needs these departments because it is to them that we must look for clean foods, for high class foods of better quality, for sanitary and health provisions relating to the handling of foods, and for the continued inspection of such products as milk and bread and meats and sausages and other "bulk" products. But their permanence cannot possibly be based upon trivial or foolish causes for prosecutions.

SOME CITY MILK ORDINANCES.

Texarkana, which lies on either side of the Texas-Arkansas line, has two separate city governments. In framing local ordinances the amenities are not forgotten and there is co-operation and the interchange of ideas. Upon ordinary questions of public policy this is not so important as when questions of health and hygiene arise, so that the news that the two parts of the town are consulting on a joint ordinance to control the milk supply comes as a confirmation of the public's idea of the importance of this question. Both councils desire the passage of an ordinance that will be uniform and effective. The only difference of opinion is that the council on the Arkansas side of the town wants the ordinance to fix a fee for inspection, which is not approved by the Texas councilmen. However, they have agreed that, rather than have the ordinance defeated, they will insert in the Texas ordinance a provision for the collection of an inspection fee, the same as may be provided for in the ordinance to be passed by the council on the Arkansas side.

Health Commissioner Young of Chicago is urging all good citizens to join in the effort to get a satisfactory milk ordinance passed. In spite of the prognostication that the passage of the ordinance will increase the expense of production and concurrently raise the price a cent or more per quart, the commissioner is strongly for the new ordinance, which provides for pasteurization. In a recent bulletin he says:

"There are 2,250,000 people in Chicago who are vitally interested in the milk question. None of them have appeared to urge their side of the question before the committee. Isn't it time they get busy?"

"The commissioner of health will make the best fight he can—not on behalf of the health department but on behalf of the people who pay his salary—but it is a one-sided fight. He asks the mothers and fathers of Chicago to come to his assistance.

"The members of the various interests opposing the pure milk ordinance are urging their views upon the aldermen of the respective wards. Who casts the most votes—those for the ordinance or those against it? Isn't it about time that those who cast the votes made their interests known to their representatives?"

"The power to decide this question in favor of the city's babies and children lies in the hands of the whole people of the city. The health department appeals to the people to arouse themselves and exercise their power."

An ordinance providing stringent supervision by the city clerk of all milk sold in Albuquerque, was twice read and ordered published at a meeting of the city council recently. The new milk ordinance is so framed that it will almost be impossible, if its provisions are strictly followed, to sell milk in Albuquerque which does not bear the stamp of approval of the city chemist. The chief feature of the new ordinance is that it provides for the inspection of all milk sold in the city, whether from dairies located in the city, one mile from the city, or ten miles from the city. It provides for the registration of all cows whose milk is sold in Albuquerque and likewise provides the fines and penalties which will follow disregard of the ordinance.

THE REAL "WATER WAGON."

Opportune, yea, timely, is the discovery of Dr. Schmidt, of Berlin, reported in a recent issue of the *New York Medical Journal*. Dr. Schmidt, that paper tells us, has discovered a disease he terms "oligodipsia," or lack of thirst. Here is the real "water wagon," the real solution of the drink evil. Just inoculate the victims of the habit with "oligodipsia" and all the gold cures of the country will go out of business; New Year resolutions easily kept, and everybody happy.—*National Bottler's Gazette*.

Official Program of the Sixteenth Annual Convention of the Association of State and National Food and Dairy Departments

To be Held in Seattle, Wash., from Tuesday, July 9, to Friday, July 12, 1912.

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The President and Secretary; Edwin DeBarr, Oklahoma;
Charles D. Woods, Maine; S. J. Crumbine, Kansas.

Other Standing Committees.

On Coöperation—S. J. Crumbine, R. M. Allen, R. B. FitzRandolph, L. Davies, A. N. Cook.

On Cold Storage—H. E. Barnard, R. B. FitzRandolph, Mary E. Pennington, M. E. Jaffa, W. B. Barney.

On Methods of Bacteriology—F. B. Billings, J. H. Wright, D. J. Healy, J. S. Abbott.

OFFICERS OF SECTIONS.

Section A—State Food and Dairy Executives—Chairman, James Foust, Pennsylvania; Secretary, W. D. Saunders, Virginia.

Section B—Dairy Officials—Chairman, W. B. Barney, Iowa; Secretary, J. G. Winkjer, Minnesota.

Section C—Food Analysis—Chairman, William Frear, Pennsylvania; Secretary, T. J. Bryan, Illinois.

Section D—Food and Drug Control Jurisprudence—Chairman, R. M. Allen, Kentucky; Secretary, C. F. McKinley, Illinois.

GENERAL ANNOUNCEMENTS.

This meeting will be held under the revised constitution adopted at Duluth, which provides for four sections. The meeting of the whole Association will occupy the morning sessions, the afternoon sessions being given up to sectional meetings.

All meetings will be held at the University of Washington, the use of whose rooms has been tendered by its president.

In both general and sectional meetings twenty minutes is the time allotted to the reading of each paper. Each speaker joining in the discussion will be limited to five minutes and ten minutes will be allowed the reader of the paper to close the discussion.

LUCIUS P. BROWN, President.

(Note—All sectional meetings are to be held in the afternoon, beginning at 2 o'clock.)

TUESDAY, JULY 9.

10 A. M.

Meeting of General Association.

Address of welcome on behalf of the state by his Excellency M. E. Hay, Governor of Washington.

Address of welcome of behalf of city by Hon. George F. Cotterill, Mayor of Seattle.

Response to addresses of welcome by R. M. Allen.

Vote of ratification of new constitution.

President's Address—"Recent Progress in Food and Drugs Control Work."

Reports of Standing Committees—Executive Committee, Committee on Coöperation, Committee on Cold Storage, Committee on Bacteriologic Methods.

Appointment of special committees.

Tuesday, July 9, 2 P. M.

SECTION A—ASSOCIATION OF STATE FOOD AND DAIRY EXECUTIVES.

Annual address of Chairman.

Report of Secretary.

1—"Should an Executive Officer Have the Right Under State Food Laws to Institute Executive Hearings to Dispose

of Cases of Violation Without Reference to the Courts?" by Chas. D. Woods, Maine.

2—"In States Having no Central Laboratory Is It More Advantageous to Employ the Analyst Upon a Fixed Salary or at a Stated Price per Sample Analyzed?" by H. E. Barnard, Indiana.

3—"Should Food Executives Pass Upon the Legal Sufficiency of Labels for the Information of Manufacturer or Dealer?" by E. F. Ladd, North Dakota.

4—"What Should the Annual Report of Food Executives Include?" by William P. Cutler, Missouri.

5—"The Public Press as an Agency in the Pure Food Cause," by James H. Wallis, Idaho.

6—"Creamery Inspection and Its Organization," by B. H. Rawl, District of Columbia.

SECTION C—FOOD ANALYSTS.

President's Address—William Frear, Pennsylvania.

1—"Relative Toxicity of Substances Found in Foods," by Alfred N. Cook, South Dakota.

2—"A Discussion of the Objects to be Attained by Section C," by T. J. Bryan, Illinois.

3—"On the Disappearance of Added Formaldehyde in Milk," by M. E. Jaffa and C. H. McCharles, California.

4—"Fill of Canned Goods," by R. E. Doolittle, Bureau of Chemistry.

5—"Mince Meat Standards," by Craig Atmore of Atmore & Son, Philadelphia.

6—"Mince Meats and Their Composition," by E. F. Ladd, North Dakota.

WEDNESDAY, JULY 10.

10 A. M.

Meeting of General Association.

Reports of special committees.

Report of Secretary.

Report of Treasurer.

1—"The Object of the Association as Defined by the New Constitution," by A. H. Jones of Illinois. To open discussion, Charles D. Woods, Maine.

2—"Under What Department of the State Government Can Food and Drug Laws Be Most Effectively Enforced," by M. E. Jaffa, California. To open discussion, J. Q. Emery, Wisconsin.

3—"Publicity for the Work of Food Inspection and the Best Methods of Obtaining It," by E. F. Ladd, North Dakota. To open discussion, W. D. Saunders, Virginia.

Miscellaneous business.

Wednesday, July 10, 2 P. M.

SECTION B—SECTION OF DAIRY OFFICIALS.

Chairman's address.

Papers by B. H. Rawl, Washington, D. C.; J. W. Bailey, Portland, Ore., and J. G. Winkjer, St. Paul, Minn., on subjects to be announced.

SECTION C.—FOOD ANALYSTS.

7—"Interpretation of Vinegar Analyses," by W. H. Harrison, Illinois. Discussion by R. E. Doolittle, Bureau of Chemistry.

8—"The Arrangement of the Food Laboratory," by H. N. Loomis, Bureau of Chemistry.

9—"A Note on a Simple Apparatus for the Gravimetric Determination of Benzoic Acid," by William Frear, Pennsylvania.

10—"Apparatus for the Determination of Fat by the Rosa Gottlieb Method," by William Brinsmaid, Illinois.

11—Round Table on Laboratory Records for the Official Food Laboratory, opened by E. L. Redfern, Nebraska.

SECTION D—FOOD AND DRUG CONTROL JURISPRUDENCE.

Appointment of committees.

1—"Duplicate Samples, Notice of Hearing Before Food Control Officials," by James C. Adkins, Department of Justice, Washington, D. C.

2—"Seizure, Condemnation and Proceedings Thereon," by W. P. Jones, United States Department of Agriculture, Washington, D. C.

3—"Food Standards and Rulings of Food Department," by C. F. McKinley, Illinois Food Commission, Chicago, Ill.

THURSDAY, JULY 11.

10 A. M.

Meeting of General Association.

1—"The Necessity for Drug Control and the Best Means of Enforcing Pure Drugs Laws," by A. N. Cook, South Dakota. To open discussion, S. J. Crumline, Kansas.

2—"The Necessity for Coöperation Between State and Municipal Food Controls," by William P. Cutler, Missouri. To open discussion, S. E. Strode, Ohio.

3—"Should Laws Governing Food Sanitation be Enforced Through Foods and Drugs Control, or Through Other Agencies?" by H. E. Barnard of Indiana. To open discussion, L. Davies of Washington.

Miscellaneous business.

Thursday, July 11, 2 P. M.

SECTION A.—ASSOCIATION OF STATE FOOD AND DAIRY EXECUTIVES.

7—"What form of Procedure Is Most Efficient for Food Control Laws—The Criminal With or Without Summary Conviction or Civil Procedure?" by R. M. Allen, Kentucky.

8—"Should a Portion of the Official Sample be Given at Time of Purchase?" by H. F. Potter, Connecticut.

9—"In Purchasing Food Samples, Should the Sampling Agent Disclose His Official Position to the Dealer?" by A. H. Jones, Illinois.

10—"Methods of Organization for Food Control Work," by L. Davies, Washington.

11—"Publicity Work of the Food Control," by J. W. Bailey, Oregon.

Election of officers.

Adjournment.

SECTION C.—FOOD ANALYSTS.

12—"A Method for the Determination of Starch in Meat Food Products," by T. M. Price, Bureau of Animal Industry.

13—"The Analysis of Catsups," by Alfred N. Cook and H. E. Bishop, South Dakota.

14—"Compound Mustards," by H. E. Barnard, Indiana.

15—"New Data on the Composition of the Oyster," by H. E. Barnard, Emma Crandal and Charles Coffin, Indiana.

16—"Formic Acid in Fruit Products," by F. L. Shannon, Michigan.

17—"On the Determination of Fat in Ice Cream," by A. R. Mehrtens and G. R. Stewart, California.

18—"Duties of a Food Chemist as a Witness for the State," by William Frear, Pennsylvania.

Election of officers.

FRIDAY, JULY 12.

10 A. M.

Meeting of General Association.

1—"The Best Methods of Securing Needed Legislation," by R. M. Allen, Kentucky. To open discussion, Edwin DeBarr, Oklahoma.

2—"The Best Method of Coöperation With Civic Leagues, Health Leagues and Like Organizations," by R. B. FitzRandolph of New Jersey. To open discussion, Hon. Neils P. Hansen, Nebraska.

Election of officers.

Miscellaneous and unfinished business.

Adjournment.

Friday, July 12, 2 P. M.

SECTION B.—SECTION OF DAIRY OFFICIALS.

Papers by L. Davies, Seattle, Wash.; Willard Hansen, Salt Lake City, Utah, and M. A. Scovell, Lexington, Ky., on subjects to be announced.

Report of Committee on By-laws.

Election of officers.

Adjournment.

SECTION D.—FOOD AND DRUG CONTROL JURISPRUDENCE.

4—"Review of Principles of State Police Power and Interstate Commerce Established in Oleomargarine Litigation," by G. L. Flanders, Department of Agriculture, Albany, N. Y.

5—"Best Methods of Legal Procedure in Sanitary Control of Foods," by James H. Wallis, Dairy, Food and Sanitary Inspector, Boise, Idaho.

6—"Scope of Work for Food Law Section," by the Chairman.

Report of Committee on By-laws.

Election of officers.

HEADQUARTERS.

The Hotel Savoy on Second avenue has been assigned as headquarters. The following are the rates: Single without bath, \$1.50 and \$2 per day; double without bath, \$2.50 and \$3.50 per day; single with bath, \$2.50, \$3 and \$3.50 per day; double with bath, \$5 and \$6 per day.

ITINERARY OF CONVENTION TRAIN FROM CHICAGO.

The following schedule for the "Pure Food Special" over the Chicago, Burlington & Quincy and Northern Pacific railways, from Chicago to Seattle, has been announced:

June 30th. Leave Chicago 10:45 p. m., Burlington route.

July 1st. Arrive St. Paul 10:45 a. m., Burlington route.

July 1st. Leave St. Paul 11 a. m., Northern Pacific railway.

July 2nd. Arrive Gardiner, Mont., 5:20 p. m., Northern Pacific railway. Leave Gardiner by six-horse stage coach at 5:20 p. m. Arrive Mammoth Hot Springs hotel 6:30 p. m. Dinner and lodging.

July 3rd. Leave Mammoth Hot Springs hotel 8 a. m., after breakfast. Arrive Norris at noon for lunch. Leave Norris at 1:30 p. m. Arrive Fountain hotel, Lower Geyser Basin, at 5:30 p. m. Dinner and lodging.

July 4th. Leave Fountain hotel at 8:30 a. m., after breakfast, for Midway and Upper Geyser Basins. Lunch, dinner and lodging at Old Faithful inn.

July 5th. Leave Old Faithful inn at 7:30 a. m., after breakfast, for West Arm of Yellowstone Lake. Lunch at Lake and leave for Colonial hotel at Yellowstone Lake outlet at 1 p. m. Dinner and lodging at Colonial hotel.

July 6th. Leave Colonial hotel at 8:30 a. m., after breakfast, for Grand Canyon. Arrive at Grand Canyon at 11:30 a. m. Lunch, dinner and lodging at Grand Canyon hotel.

July 7th. Leave Grand Canyon hotel at 8:15 a. m., after breakfast. Lunch at Norris. Arrive Mammoth Hot Springs hotel at 3:30 p. m. Dinner. Leave Mammoth Hot Springs hotel at 6:30 p. m. Arrive Gardiner 7:15 p. m. Leave Gardiner 7:15 p. m., Northern Pacific railway.

July 9th. Arrive Seattle 8:30 a. m., Northern Pacific railway.

Members and others desiring to go direct, omitting the park tour, may take advantage of the fast, through service as per schedule below:

July 5th. Leave Chicago 10:15 p. m., Burlington route.

July 6th. Arrive St. Paul 10:45 a. m., Burlington route.

July 6th. Leave St. Paul 11 a. m., Northern Pacific railway.

July 8th. Arrive Seattle 8:15 p. m., Northern Pacific railway.

ENTERTAINMENT OF DELEGATES AND VISITORS.

The ladies of the convention visiting and members (if any of the latter) will be entertained one afternoon at some theater. There is a possibility of an afternoon ride on the Sound for the ladies, but this is not definitely settled. The usual ride about the boulevards for the whole convention will be given. On Saturday, the day after the convention adjourns, or on Friday, the last day, if the convention so decides, a boat will be chartered to take the whole convention on an all day trip on the Sound, visiting a salmon cannery in operation and holding sessions on board if desired. Dinner made entirely from Washington products will be served on board. The party will be received at Bellingham by the Chamber of Commerce of that city. The trip will be among the islands and through the famed Deception Pass, reaching Seattle about 9 o'clock at night, a beautiful trip that none should miss.

LAND VALUES AND HIGH MEAT PRICES.

One by one the great stock ranches which have made the West picturesque are yielding to the demand for small farms. The latest example is the great Modoc range in California, which is now being broken up. The Lake Shore cattle range, on the shore of Goose lake in the Davis river country, was lately sold to purchasers in Portland, Ore., and will be cut into small farms and colonized. Small farming is unromantic and offers no material for the "all-fiction" magazines, but it increases greatly the productive power of land. Cattle, of course, we must have, even if it is necessary to feed them on cucumbers extracted from sunshine—a Laputa miracle which the German chemists may yet achieve. But for the present fertile land is increasingly becoming too valuable for big stock ranges.—*Springfield Republican*.

Our Washington Letter

By Our Staff Correspondent.

WASHINGTON, June 10, 1912.

About all the interest the food and drug people in Washington are taking in anything other than partisan politics just now centers in the obvious efforts Dr. Wiley is putting forth to control the appointment of his successor in office, which efforts have much to do with the annual meeting of the Association of State and National Food and Dairy Departments to be held at Seattle on July 9. By standing on one's head while repeating the shorter catechism or something like that it might become obvious why the doctor is so anxious to control the appointment of his successor.

Low-browed politicians might suggest a reason, but God forbid that any one should be so evil-minded as to make the suggestion a politician would put forth. The office of chief chemist for at least twenty-seven years was administered in such a way that anybody might step into it and find nothing to criticize. Improvement would be impossible. Disinfection of even the mildest character would be profanation.

Yet it is known that Dr. Wiley and Dr. Bigelow have had their heads together on that subject. One of the matters that has been talked about by Dr. Bigelow's friends has been the advisability of having the Seattle convention endorse Dr. Bigelow and recommend him for appointment to the vacancy created when Dr. Wiley was "forced" out of office.

Just as a sidelight, not anything material, it may be observed at this point that, figuratively, Washington stood on its hind legs and brayed when Dr. Wiley remarked, anent the offer of the health officership of Boston, that if he accepted the office it would be with no thought of the \$7,500 salary. Washington brayed because it is an ass, probably, but inasmuch as it had heard that the magazine that snagged the doctor away from his government office is paying him either \$7,500 or \$10,000 a year and that he has a lecture bureau engagement at the rate of \$10,000 a year in addition, there was probably some reason for the asinine greeting of the good doctor's edifying assertion with regard to the salary attached to the Boston office.

However, that is merely an aside. The chief point is that the two doctors, Wiley and Bigelow, or perhaps it would be better to say their partisans, are discussing the advisability of having the Seattle convention endorse Bigelow. An endorsement of that kind would doubtless be a matter of great prestige. There is, however, a small fly in the ointment. Suppose, after the proposition had been made, the endorsement were not forthcoming, or if produced, it were given by such a narrow margin as to lead President Taft and Secretary Wilson to question whether Dr. Bigelow would, after all, be such a fine successor to the man who has made so many ladies believe that but for his efforts not only they but all their children would have been killed years ago.

Endorsement by a narrow margin might not be worth as much as absolute silence on the subject. It is not safe, therefore, to say that a resolution will be offered advising the continuance of Wileyism in the office of the chief of the Bureau of Chemistry. There are a good many states where the food and dairy officials have a definite idea that Wileyism is something undesirable, whether it be in the enforcement of state or Federal laws.

Dr. Wiley was in absolute control of the enforcement of the Federal law when he was "forced" out and put into a position to double if not treble the income he had been receiving from the Government. Those who wonder why Wiley deems it so essential that he shall control the appointment of his successor cannot help being curious as to why, in view of the fact that he was in full control of the enforcement of the law, he deems it so essential to his welfare that he continue to exercise domination in that part of the work for true labels.

For the benefit of those who do not like Wileyism it may be stated that the Wiley-Bigelow desire is to have the association adopt a new constitution and bylaws before the officers are elected for the ensuing year. The committee on constitution and bylaws is ready with a report on their work; the essential part of the report is that the association shall be divided into sections, on food, drugs, cattle feed and so forth. The Ethiopian in that pile of cordwood is to be found in the fact that when the association is so divided the Wiley strength

will be enhanced. At least that is the word that has come to Washington.

It would seem to be the part of wisdom, therefore, for those who reprobate Wileyism to see to it that the officers of the association are elected under the old constitution and bylaws. Scrutiny of the reorganization plans would also be worth while.

It is with great regret that your correspondent announces the failure of the plans for the entertainment of Washington during the coming summer by its old friend, the Moss committee. There is to be no investigation of the meat inspection service that promised so much. The Moss committee, in theory, is still considering the stump speech made by Mrs. Crane and the proposals of the excitable Nelson. The trouble is that the committee will continue to consider the subject so long that Washington's summer somnolence will be deeper than ever before known. The rest of the country will be so engrossed with the national election that Washington will be wholly forgotten.

The implied promise of the Moss committee to keep us awake by having a continuous performance by the lady and the insurgent congressman suggested that, at least once a week, the newspapers would publish under a Washington date line a thrilling story on the horrors permitted under the present system of meat inspection. But now that is gone and it is to weep for the forlorn condition of the nation's capital.

And why did it die? Politics, politics, and nothing but politics, is the answer. Nelson is an insurgent Republican, but to the aspiring Democrats in his district all Republicans look alike. The Democratic nominee for Congress in the Nelson district has no patience with the Democrat from some other part of the country who suggests that, for all practical purposes, Nelson is as great a help to the party as a Democrat. The Democratic answer from the Nelson district is that there are many Democrats good and true in the Nelson district and that one of them should be given an opportunity to collect the \$7,500 a year salary Nelson has been pocketing.

Of what profit is it to the Democratic party to have the Democratic Moss committee pour water to make Nelson's wheel go round for the grinding of Nelson's grist?

What's the truth or falsity of the insinuation against Dr. Melvin's bureau got to do with the subject? Not a blessed thing. Truth has never anything to do with an investigation of a Republican administration by a Democratic committee, or a Democratic administration by a Republican committee.

Since Dr. Wiley gave President Taft credit for giving him full control of the enforcement of the label law and said that it was Roosevelt that was his undoing, it is doubtful whether even the Moss committee would stand for any more of Wiley. The doctor was not very clubby toward the insurgent Republican allies of the Democrats when he said that. For once in his life he told the truth in a way that hurt those who had helped him to annex the fine contracts that took the place of the government commission that enabled him to get \$5,000 a year from the public treasury. It was really indecent of the doctor to treat his fellow Democrats and their insurgent allies in that manner. It was not necessary for him to tell the truth about the matter. Some day he may blurt out the fact that just before he went out of office Roosevelt announced his readiness to fire Wiley. The then President used the good Shakespearian verb which so many poorly informed users of English place in the dictionary of slang or colloquialisms. It is not meet that there should be any expression of opinion here as to why the Rough Rider desired to dismiss the savior of weak women and defenseless children. Sufficient is the fact that he was ready to sacrifice him either to his jealousy or to his sense of decency.

But the Moss committee is working on a "scandal" even if the general public is not invited to a daily thrill on the work it is doing. It is raking over the dying embers of the everglade matter. It is, however, keeping away from the accounts, the falsification of which, by somebody, caused the grand jury to report several indictments against former employees of the Department of Agriculture. J. O. Wright is still the individual Moss is after, but thus far Wright appears to have been able to keep Moss from laying even a half way respectable foundation for a fulmination against him.

A one-day story about Solicitor McCabe was sprung by the Hearst organization, of which Dr. Wiley is now a member. Without qualification the principal Hearst paper in the East announced that McCabe, "rather than face more drastic proceedings," would resign his office before snow flies again. The newspaper made the startling discovery that Mrs. McCabe and the children are at Ogden. That fact was sufficient for the assertion that the solicitor intended returning to Ogden to practice law.

Those who know McCabe knew that he intended to resign just like a bulldog gives up a bone when some other dog comes along and bids him do so. It was hardly necessary for McCabe to say he had no thought of resigning. But he did that, remarking also that it has been the custom of Mrs. McCabe to spend summer at her home; that she had gone there every year for the last seven years and would probably go again next year. He added that when he made up his mind to resign he would make no secret of it, thereby assuring those who have been looking to him for news that he would not, like his friend Wiley, deny his intention to resign up to the very minute before he tendered the document giving up his office. Dr. Wiley misled the newspaper men who had been shading the news for his benefit up to within a few hours of his resignation, while the men who told the truth about Wiley told the fact about his intention to quit.

To determine the food value to animals of sulphured oats, concerning which there has been much discussion for several years, the Department of Agriculture will make tests on horses and cattle on one of its experiment farms near here. After a conference between Secretary Wilson, Representative Moss, chairman of the House Committee on Agriculture, and several of the Department Bureau chiefs, it was decided that the bureaus of plant and animal industry jointly should conduct actual experiments to see whether the sulphuring of oats injures it as animal food. The feeding will begin shortly and will continue probably for two or three months.

At the same time two earloads of corn, subjected to various degrees of heating, will be fed to cattle, sheep and hogs on the Department's farm to find out whether heated and moldy corn is a fit animal food.

The Department of Agriculture has taken steps to expose land investment frauds and protect the people of the country against these swindling schemes.

Secretary Wilson has ordered the collection of data to place the Department in position to aid such investors. Bulletins are to be issued warning against certain general propositions and specific information will be given by correspondence upon request. Thousands of city folk—and many others—Secretary Wilson declared today, were being encouraged to put savings into land selling, orchard growing and crop producing schemes, many of which were swindles.

"Many people with little or no knowledge of agriculture are being led to invest money in projects which by no reasonable chance can ever be made to pay the profits claimed for them," said the Secretary.

"One of these concerns recently wrote to Dr. Galloway, chief of the bureau of plant industry, not knowing who he was. It was like some stock swindler trying to sell worthless paper to J. P. Morgan. This concern promised big returns in a few years from a certain crop, and only one versed in the subject would realize that it was impossible.

"After they had written to Dr. Galloway three or four times they wanted to know what he 'was thinking of doing with their proposition.' He replied that he 'was thinking of reporting it to the Post Office Department,' whereupon their correspondence terminated abruptly."

Communicated

THE BROOKS LAW OF NEW YORK.

ROCHESTER, N. Y., May 24, 1912.

To the Editor AMERICAN FOOD JOURNAL—The Brooks bill, hurriedly passed at the last session of the state Senate, March 29th, and hurriedly signed by the Governor on the 2nd of April, before any hearing could be demanded and before any but the promoters could know that it had passed, is credited by its promoters with being a panacea for the high cost of living.

So much for the telegraphed memorandum of the Governor giving cause for his hasty action, and the subsequent interviews with promoters and officials to become beneficiaries

through the vast extension of their powers. Now the real question is, how is this measure to reduce the selling price of any commodity that enters into daily consumption?

The State of New York is perhaps the largest producer of foods, drinks and condiments, in paper packages, cans and bottles. What will it cost the producers to comply with the new act, by changing the form of containers or changing labels? Probably three or four millions of dollars because, in many cases, the change will extend to the machinery for the manufacture of the containers.

These changes will probably consume the entire profits of a year's operations, so close is the competition and so small the margin of profit, with the sale of the present packages. Does any one know of any producing firms becoming enormously rich and paying heavy dividends under the existing competition with other states and the hair-splitting requirements, aimless seizures and prosecutions of over-zealous agents of the Federal government?

What will the producers do—charge the three millions to the consumers, deluded by demagogues and cocksure "orators," move to another state, or go out of business? These are the questions. Those who change everything will still be obliged to compete at a disadvantage with those outside dealing under the protection of interstate commerce.

The present trade in package goods is perfectly honest and legitimate. A certain package which may be tested by a buyer sells at a certain price, and no buyer is obliged to take it. The law is really an interference with the right of free trade and free contract or sale. The state can interfere to guard the public against injurious things and can command correct weights when sales are by weight. But the state has no jurisdiction to say that one shall not sell a given package to one who wishes to buy.

So, in part, the Brooks law is a rank interference with vested rights and the freedom of contract. It will benefit nobody but those who execute it; and I understand they were the chief promoters, to cover the business of the state with prosecutions or with failures or migration of industries.

If men of ordinary intelligence were to sit up nights to devise means to oppress and ruin our industries and fool the dear people, they could not succeed any better than the promoters of the Brooks law.

The cost of living has advanced steadily under the devices of the over-zealous who would regulate or destroy about everything under the sun. The cost of defending mere existence has increased the cost of nearly everything.

As reported in your issue of May 15th, the Appellate Division of the Supreme Court in New York City, has reasserted the freedom of contract and sale of package goods without reference to weight of contents.

OBSERVER.

RIGHT USE OF COFFEE BENEFICIAL.

Years ago Moleschott declared that the use of coffee, tea, and tobacco, served to retard the waste of tissue, calling them the "savings banks" of the system. Confirmation of his work has been verified over and over again. The latest study in that direction has been done by Dr. H. L. Hollingworth, instructor in the department of psychology, Columbia University, after a forty days' experiment with a "poison squad" of sixteen. The results of the investigation will be set forth in a monograph as a number of the archives of Columbia University.

According to Dr. Hollingworth's deductions caffeine is the one known stimulant that quickens the functions of the human body without a subsequent period of depression.

"The only explanation of this, so far as I know," said Dr. Hollingworth, "is that caffeine acts as a lubricator for the nervous system, having an actual physical action whereby the nerves are enabled to do their work more easily. Other stimulants act on the nerves themselves, causing a waste of energy, and consequently, according to nature's law, a period of depression follows, and the whole process tends to injure the human machine. Our experiments at Columbia have shown that in not a single instance has a depression followed the use of caffeine.

"However, this verdict in favor of caffeine must not be considered as an indorsement of drinking too much coffee, because coffee as well as tea contains other elements that act as stimulants and that induce periods of reaction, and hence are injurious to the system. Coffee has an oil that induces sluggishness and whose effects last much longer than that of caffeine. Tea contains tannin, whose bad effects are well known."

Household Science and the Table

OUR DAILY BREAD.

By Elenora Elizabeth Reber.

This is a conservative old world, after all; with all our progress we cling to old ways to which we have become accustomed, old ideas and methods, and often are sorry indeed when we find ourselves obliged to discard some time-honored practice or theory and replace it with a more modern deduction of scientific research.

One of the things which many housewives have been most reluctant to release from the domain of their own kitchens is that of breadmaking. They have gladly sent the washing and ironing to the laundry; they have a marked preference for creamery butter, and factory-canned fruits and vegetables have displaced the home-preserved products. But breadmaking, one of the most difficult of cooking tasks, marks the last stand of the conservatives in many instances. This in face of the fact that bakery bread is fully as nutritious and quite as palatable as the greater quantity of home-made bread, and is being used exclusively in many homes.

One of the objections often voiced against baker's bread is that it is invariably of so exactly the same flavor that the taste finds it monotonous; yet who would have that quality of uniformity varied with a batch of sour or overdone or underdone bread, in order to achieve variety? And few are the home breadmakers who do not have this kind of "variety" to contend with. This is not so much a reflection on the ignorance or carelessness of the average housewife, but indicates more especially her lack of time and facilities for producing uniformly perfect results. On the other hand, however, there are many people who consider this dependableness on the quality and flavor of the baker's product its chief advantage.

Most housekeepers cannot afford to throw away their partial failures in cooking or baking; but if the product is at all eatable, it is served. On the other hand, a bakery catering to the public would not think of trying to sell a quantity of bread that was not up to its usual standard, but would, of necessity, stand the loss in order to maintain its reputation and retain its custom.

SOME BREAD HISTORY.

If there is one evidence which, more than another, indicates the fortunate condition of circumstances material we enjoy in these "piping times of peace" and plenty, it is the immense quantities of bread that we daily consume. Millions upon millions of bushels of wheat are annually ground into flour and made into some form of bread product, and so lightly do we esteem the "staff of life" from a money standpoint, so cheap and universal has bread become, that its lack



DOUGH IS KEPT AT EVEN TEMPERATURE.

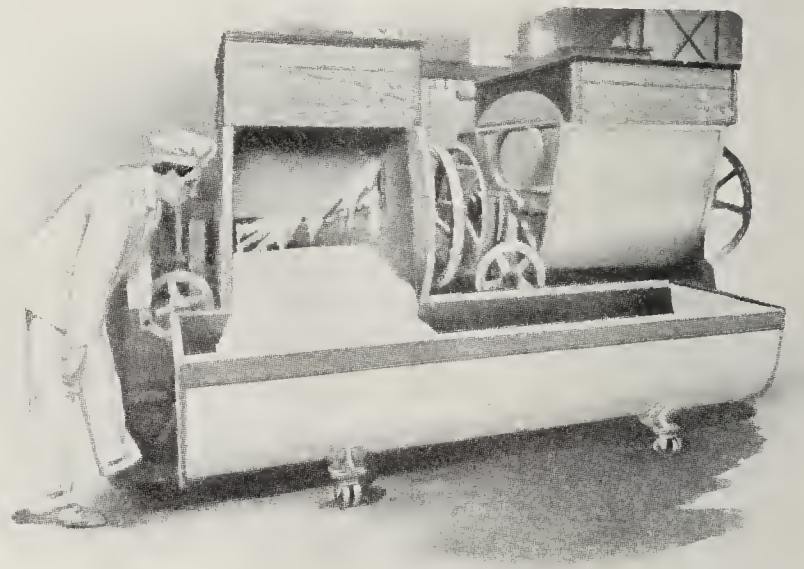
in any home is recognized as a symbol of abject poverty. "They had not even a crust of bread in the house," expresses to us the last extreme of material need.

Yet there was a time in the history of the world when bread was a delicacy, obtainable only by the very wealthy. Gradually conditions changed, more wheat was grown, bread became more plentiful and those of more moderate means could enjoy it. Then later, even the poorer classes were able to

have it on their tables occasionally; but only in comparatively recent years has bread become so cheap and plentiful that even those in very straightened circumstances may eat it every day and at every meal, if they so desire.

In common with numerous other culinary processes, that of breadmaking has undergone an interesting evolution throughout the ages, and that product which we have at present of that name is entirely different and greatly superior to that which was so highly esteemed in earlier ages.

The first "bread" of which we have authentic history was made from flour ground between stones, and was mixed with water only, while the baking of this most primitive mixture, in fact, but paste, was accomplished by direct heat from the sun.



A MECHANICAL BREAD MIXER.

Ovens came into early use, however, both public and private, and the baker's trade has ever been an honorable one.

The actual age of the ancient human art of breadmaking is impossible to estimate with any correctness. At Wangen and Robenhausen have been found the calcined remains of cakes made from coarsely-ground grain in Swiss lake dwellings that date back to the stone age.

In primitive times, baking and milling were twin arts. The housewives and daughters, or handmaids, crushed and ground the grain and also prepared the cakes or bread. When Abraham entertained angels unawares he bade his wife "make ready three measures of fine meal, knead it and make cakes upon the hearth." Professor Maspero says that an oven for baking bread was found in every house in Chaldea and close by were kept the grinding stones.

The ancient Egyptians carried the art of breadmaking to high perfection. Herodotus remarks of them: "Dough they knead with their feet, but clay with their hands." The practice of using the feet for dough-kneading, repulsive as it is to us, long persisted in some countries, and it is stated that even yet in certain districts of Scotland that primitive system is in vogue. In this connection it is interesting to note that the usual order of progress common to mechanical progresses is reversed, and while, ordinarily, handpower is made to give way to footpower, in breadmaking the foot is superseded by the hand.

AS TO SANITARY CONSIDERATIONS.

The ideal condition in preparation of any food product is the elimination of all contact with any part of the body, hand or foot, and bakeries of today have arrived at a distinct stage of progress, for in the most modernly equipped plants the human hand has been virtually superseded by machines, making possible the production of an absolutely sanitary article.

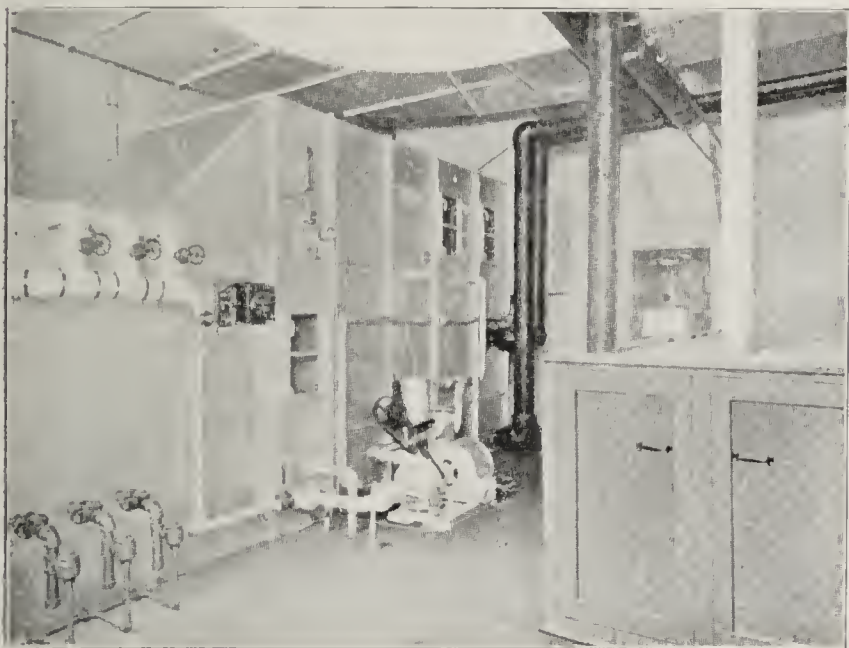
We all know that it is much easier to keep clean a machine than any part of the body, however careful an individual may be. The exudations from the pores of the skin are constant, though invisible, and to cleanse the hands absolutely from exterior deposits equally invisible is almost impossible. It is common experience of the home breadmaker to find her hands in lily white condition after mixing and kneading her bread,

and the reason for this is obvious to anyone whose attention is once called to the fact.

When everything is taken into consideration, it is very apparent that the ability of the well-equipped, up-to-date, modern baking plant to produce clean, sweet, appetizing bread is infinitely greater than is possible in a large percentage of private kitchens. The latter lack the necessary expensive equipment and the ordinary housekeeper could hardly be expected to possess the exhaustive scientific knowledge and practiced skill available in the large bakery which has been built and installed by experts, with one idea in view—that of making perfect bread.

There has been, and is, constant and concerted effort on the part of professional bakers to improve factory methods, conditions, equipment and knowledge in order to produce the most palatable and nutritious bread possible to meet the demands of an educated and minutely informed consuming public. The unceasing effort of the managers of modern bakeries is for the attainment of absolute cleanliness, perfect sanitary conditions, together with mechanical and scientific exactness that shall practically eliminate the possibility of failure or variability of results.

As an instance of how far this idea of cleanliness is carried, it may be cited that while every precaution is taken to keep the air in the bakery clean and pure by the most approved methods of ventilation, in addition to this there is a machine used for washing this air after it has entered the building, and from the washer the air is forced into the rooms



AIR WASHING APPARATUS IN A BAKERY.

wherein the breadmaking process is being carried on. The large amount of mud or sediment left in these wonderful washers after the air has passed through them, is proof conclusive of how inconceivably large an amount of removable dirt is common to that air even which we are wont to believe is purest.

Breadmaking in a bakery is accomplished on exactly the same principles as in the home kitchen. There is no commercial secret in the process. Success depends upon absolute control of conditions, including temperature and humidity of air and ingredients, dough, etc., and utmost mechanical exactness in the application of scientific knowledge as to causes and effects. There is no guesswork in the factory; nothing is left to chance; luck has nothing to do with the production of good bread.

HOW THE FACTORY PROCEEDS.

There is no undue hustle or hurry in a big bakery which turns out its thousands of loaves a day; all is calm, precise, cool, and an atmosphere of assurance pervades the place. There are no anxious eyes or wrinkled foreheads disclosing inward anxiety as to how the bread is going to develop. The baker knows exactly what results will be, barring a breakdown of machinery.

A large bakery purchases its flour in not only carload, but trainload lots, and this flour, which has already been passed out of the mills as first quality, must, before it is accepted by the bakery, pass another test made by the plant's own experts. Thus chances are reduced to a minimum that there shall be accepted any flour of inferior grade. There are variations in constituents of flour, however, which, while not rendering it inferior from a commercial standpoint, will necessitate different treatment when used for baking, unless these differ-

ences are overcome. It is no uncommon thing for a housewife to purchase a sack of flour of a certain brand and quality and not having sufficient when the amount is nearly gone to make another baking, buy another sack of exactly the same brand and grade and use the remainder necessary from the new sack. It is immediately noticed that it looks and feels a little different from the flour of the first sack. One is a little closer packed than the other, and instead of falling apart in a dry, mealy way, it clings together in a mass. This is traceable to the variation in the humidity of the flours, caused by natural moisture of the wheat, and while there is no difference in the grade of the two flours, the results of the baking in which both kinds are used will not be the same.

The gluten is the constituent of flour most important to the baker because on its quality and quantity depend the strength or rising power of the product. To insure uniformity in this respect flours are mixed and blended. This is done before the sacks are emptied into the storage bins. After blending the flour is also put through the finest of bolting cloths as a precaution against the possibility of even a perfectly clean string, for instance, finding its way into a loaf of bread otherwise delicious and without shadow of fault.

After the flour has been blended to the proper test by the bakery's expert, it is placed in the storage bins and allowed to remain there and become thoroughly aerated and neutralized as to temperature and moisture. These bins are placed at an elevation directly above the mixing machines. When ready to begin the mixing of the sponge a chute is opened and the flour drops onto an automatic weighing apparatus, which allows an exact amount to fall into the mixer. Fresh compressed yeast is usually used and the amount to each batch is governed by the weight of flour. So also are the other ingredients, distilled water, tested sugar and salt, etc., mixed with mechanical precision as to amounts. All weighing machines are set by the master baker and no employe is allowed to change them.

In the mixing machine the ingredients are thoroughly amalgamated, the dough is twisted and turned and punched by giant arms in as near the human manner as it is possible for a machine to attain. These arms never tire, are never in a hurry, and as kneading is one of the most important features of good breadmaking, these are facts worth mentioning.

When the proper degree of lightness has been attained in the kneader the dough is automatically poured into long, white rising troughs, about two feet deep and eight or ten feet long. These troughs, with their contents, are then transferred to the dough room and allowed to remain there until the dough is properly risen or "proven," as the bakers express it. These dough rooms are made with insulated walls, installed with heating pipes and apparatus and equipment for expelling and changing the air, which, as stated before, is washed; and it is thus possible to absolutely control the temperature and maintain it uniform while the filled troughs are in the room. In a modern bakery the air is renewed in mixing rooms and wherever the bread is handled every 20 minutes. After the first rising the dough is folded down once or twice, as is deemed best, and allowed to rise again, just as is the practice in the home kitchen.

From the dough room the contents of the troughs is transferred through chutes to the room below and put through the machine for dividing the mass into amounts of an exactly uniform weight for molding into loaves. Endless belts convey the divided portions of dough to the rounder up, a cleverly constructed machine which rolls the dough along and around the sides of a circular mechanism, so that it is made into smooth, cylindrical form, and in that shape goes to the molding machine. By means of a succession of belts cleverly arranged the loaf is molded into proper shape, and is then deposited in the pans in which it is to be baked. The pans are placed on racks and the racks run on tracks into the steaming room, or automatic prover, where steam permeates the mess at every point, simultaneously warming the dough through evenly and bringing it to the correct temperature. This accomplished, the racks are removed from the steam boxes and the pans are next placed in the ovens. The steaming process prevents a crust from forming on the top of the loaf of unbaked bread, with the result that while the top of the loaf is properly browned in the oven, it is not baked into a crust of undue crispness. The ovens are beautiful white tiled affairs, and are maintained at a temperature in the neighborhood of 500 degrees.

Immediately upon being removed from the oven the freshly baked bread is transferred to the cooling room and there allowed to remain until the temperature is properly reduced to allow of proper handling. When cooled the loaves are

wrapped in a machine and the product is then ready to be sent out for distribution to consumers.

An item worth mentioning is the manner in which the loaves are labeled. Many people labor under the mistaken idea that the labels on bread are applied with the help of mucilage, and some have conceived the surprising notion that these labels are licked with the tongue before being applied! Such is not the case, however, the interesting fact being that the gluten of the flour itself has adhesive qualities and when the dry labels are applied to the damp loaves before being placed in the oven, the moisture of the dough is sufficient to supply the necessary paste to cause the label to stick. Thus we have a perfectly clean label applied in a perfectly clean manner to a perfectly clean loaf of bread.

The important point for the housekeeper to notice is that the label be one which bears the name, or trade-mark of a strictly modern, sanitary and properly conducted plant, so that utmost reliance may be placed on the quality of the product. If your own eye and taste are not sufficient to demonstrate to your satisfaction that the bread which you purchase has been prepared under the best conditions, then by all means visit the bakery the product of which you use and ascertain the facts positively for yourself.

There is no part of the process of breadmaking in a factory that is not alike pleasing to the eye and the imagination. A baking plant of modern type is practically odorless until one emerges into the section where the ovens are located and is present when the newly-baked bread is removed therefrom, when the nostrils are greeted with a delicious aroma which only new-made bread possesses.

As to the handling of bread after it leaves the bakery by dealers, that is another story. It is possible, however, for the consumer to have assurance that it has suffered no deterioration or unclean handling by buying only such bread as comes from the bakery wrapped in oiled paper, the packages fastened with seals. I am told, however, that the buying public has not taken kindly to wrapped bread, as many purchasers want not only to see but feel the bread before they buy it. Those who desire to prove bread by handling it, must remember that such loaves are open to similar tests by as many other customers as may be equally skeptical, and as a result, a dozen different persons may have handled the loaf finally chosen by the purchaser. Many bakeries themselves furnish closed bread cases for grocers, so that such a practice cannot be indulged in by careless people. It is certainly as safe to buy bread by brand, and the exercise of confidence in the manufacturer as it is to buy countless other articles of food in sealed packages.

I am an advocate of the use of baker's bread wherever it can be obtained fresh, because I believe it to be more wholesome than the very large percentage of home-made bread, and just as delectable to the taste.

Bread baking is hard work physically and the cause of much anxiety to the one who does it. The ordinary kitchen is not equipped to produce bread under proper conditions, and the expense of the home-made loaf is very close, if not equal, to the baker's loaf. If one counts cost of labor, the bakery bread would prove the less expensive, probably, in every case.

Let us not cling unreasonably to old ideas in reference to home-made bread, but accept the new order and surrender the breadmaking task, as we have so many others, to the specialists whose knowledge and skill make them adepts in the art.

VALUE OF PACKING HOUSE PRODUCTS.

Slaughtering and meat packing are, in value of the products, the most important industries in the United States, according to the thirteenth census statistics, given out June 7 by the Department of Commerce and Labor.

Illinois employs twice as many persons in this industry as any other state, and the value of products there is nearly three times as great as in any other.

The figures show that in 1909 there were in the United States 1,641 establishments and 108,716 persons engaged in the industry.

The capital invested amounts to \$383,249,170. The expenses in 1909 were \$1,316,366,878, of which the officials received \$4,915,326; clerks, \$15,138,161; wage earners, \$51,644,720. The taxes, including internal revenue, were \$2,026,345.

The value of products was \$1,370,568,101. The value added by manufacturer, which is the difference between cost of materials and value of products, was \$168,740,317.

Illinois had an average number of 26,705 wage earners, with \$45,618,899 in value added by manufacture, and \$389,594,956 in value of products, or about 30.27 and 28 per cent., respectively, of the general total for each item. The next state in rank was Kansas.

SOME CONCLUSIONS ON COLD STORAGE.

The cold storage investigating committee of the Chicago Association of Commerce, consisting of Arthur R. Reynolds, physician; Edward Clifford, broker; Charles D. Loper, wholesale woolen dealer; W. S. Kies, attorney, and Marvin A. Farr, real estate dealer, has presented a report, of which the following are the important conclusions:

"Cold storage is perhaps the most important single factor in the aid of the conservation of food products known today.

"Cold storage is an equalizer of prices; it makes it possible to supply cities in time of scarce production with the surplus of the time of plentiful production.

"Cold storage does not make food products undesirable for consumption when such products have been placed in cold storage in good condition and are kept only from season to season."

The members of the committee are unanimous in reporting that whatever feeling against cold storage they may have had before they began their investigation is now overcome. Their report has been accepted and approved by the Association of Commerce.

They recommended Federal control of cold storage, that legislation may be uniform throughout the country, and suggest these regulations in the interests of the industry:

"That all cold storage warehouses storing products to be shipped in interstate commerce be obliged to make monthly reports to the Department of Agriculture, stating exactly the amount of food products on hand in storage and the dates when stored, and that these reports also show the withdrawals and receipts during the month. A law requiring similar reports to be filed with the proper state officer would be desirable where such cold storage warehouses do not store products for interstate commerce.

"There should be a time specified limiting the storage period. This, in our judgment, should be one year on butter, poultry and fish, and not to exceed ten months on eggs. Eggs, under no circumstances, should be carried over the season. In fact, all storage warehouses should be cleared of eggs by the first of March."

The report further states:

"There is an unreasonable prejudice on the part of the public toward food products which have been in cold storage. This prejudice, in many instances, is unfounded; and in others responsibility for such prejudice is traceable directly to the retailer who sells food products unfit for consumption, many of which have never been in cold storage. The consumer, finding the product tainted and unfit for use, readily denominates the article as a cold storage product. To cite a specific example—fish caught in the winter time are frequently allowed to drown in the nets because of the inability of the fisherman, by reason of ice and weather conditions, to empty his nets more than once or twice a week.

"These fish are sold in the market and deteriorate rapidly. The consumer blames cold storage, whereas, as a matter of fact, a cold storage fish delivered in a frozen condition and properly thawed, is perfectly wholesome and greatly superior to the so-called 'fresh' fish.

"We believe a great deal of the criticism of cold storage products is due to the fact that the retailer displays them on his counters and in his shop after they have been permitted to thaw out, and takes little precaution to see that the article is not subjected to temperatures which will cause deterioration.

"The consumer, that is, the housewife, likewise is at fault in the care given to cold storage articles. To mention a specific illustration: A chicken in cold storage for six or eight months is delivered in a frozen condition to the retailer. If this chicken were sold at once, thawed out properly and immediately prepared for the table, it would be perfectly sweet and without a taint.

"If not immediately cooked the chicken is likely to taste tainted. Cold storage, in such a case, should not be blamed because of abuse in the method of caring for an article after it has left cold storage. It is too often the fact that retailers, presumably because of the prejudice against cold storage, rarely admit that storage products offered for sale are storage products, but sell such articles as fresh food products."

CONFECTIONERS' ANNUAL CONVENTION.

The executive committee of the National Confectioners' Association announces that the annual convention will take place at the International Hotel, Niagara Falls, June 19, 20 and 21. This will be the sixth convention of this organization convened at that place. It is the most central point available and the past meetings there have been well attended.

The Law and the Food Manufacturer

PENDING FOOD LEGISLATION.

Arizona.

Senate Bill No. 10. (By Mr. Davis.) To regulate the sale of butter and eggs held in cold storage.

Senate Bill No. 112. (By Mr. Wissel.) A general food, drink, drug and liquor bill. This bill has passed the Arizona Senate.

Senate Bill No. 141. (By Mr. Hughes.) A bill to create the offices of State Inspector and City Sealers. This bill does not carry a net weight or measure labeling clause.

House Bill No. 28. This bill is identical with Senate Bill No. 40.

Maryland.

Senate Bill No. 413. (By Mr. Price.) A bill to prohibit the sale in any portion of Wicomico county of "Turlington's Balsam," "Jamaica Ginger" and "Picnic Ginger."

Senate Bill No. 456. (By Mr. Maloy.) A bill designed to prevent a monopoly on articles in common use.

House Bill No. 697. (By Mr. Bowen.) A general amendment to the food law of Maryland, establishing many standards. It also covers misbranding of spring, well or mineral water.

Massachusetts.

Senate Bill No. 198. To establish a bushel weight for certain commodities and regulate the sale of vegetables.

Senate Bill No. 484. To regulate the cold storage of fresh meat and meat products, food fish, poultry, eggs and butter.

New Jersey.

Senate Bill No. 245. (By Mr. Smalley.) A bill to amend the food law of New Jersey by including a provision authorizing the food officials to seize food in a manner similar to the government procedure.

House Bill No. 504. (By Mr. Ogden.) A net weight and measure bill.

New Mexico.

Senate Joint Resolution No. 16. To amend the constitution of the state so as to prohibit the manufacture and sale of alcoholic beverages.

House Bill No. 148. (By Mr. Moreno.) A general food act, containing many standards.

New York.

Assembly Int. No. 1452. (By Mr. Willmot.) To provide for labeling of canned goods with the date of packing.

A New Net Weight Act for Louisiana.

Wholesale grocers of New Orleans are protesting vigorously against a bill introduced in the Louisiana Legislature which proposes to force all dealers to sell all commodities not in original packages by actual weights or measure, and when sold in packages requires the actual weight or measure of the contents to be stamped or printed on the label. The grocers oppose the bill, not because they are against uniform weights and measurements, for they are heartily in favor of them, but on the grounds that such an act, if passed, would conflict with a clause in the state food law, which says:

"Statement of the weight and measure of the food contained in a package is not required. If any such statement is printed it shall be a plain and correct statement of the average net weight or volume, etc."

The section of the present state food regulation is identical with that of the Federal act. Congress has now before it the Mann bill for consideration, which is known as a weight and measure section, and is an amendment to the Federal food and drugs act.

George P. Thompson, president of the New Orleans Wholesale Grocers' Association, is one of the most active opponents of the bill, and says regarding it:

"We are not opposing weight and measure laws, but simply asking that action be deferred until such time as the National Government passes the Mann bill, or some similar legislation, which will certainly be in the near future, and our state, with many others, will conform to it. It is a fact that some of our sister states' legislatures have deferred action for this

reason, and we feel sure in equity that Louisiana should take similar action.

"It is universally recognized that food laws, particularly, should be uniform with that of the Federal act. Our jobbers ship from state to state; one law should be the same as the other, and we are, for that reason, of the opinion that this legislation should be deferred, as we feel our legislators would not knowingly force legislation that would be impracticable. No retailer nor jobber is in such shape at this particular time to determine the net contents of many of the original packages that he has in stock. Manufacturers and packers are gradually adapting themselves to this condition."

The Gould Net Weight Bill.

The Gould net weight bill, an amendment of Section 8 of the Federal food and drugs act, was reported by the House Committee on Interstate and Foreign Commerce on June 7. The bill was slightly changed before being reported and now reads as follows:

"That section 8 of an act entitled 'An act for preventing the manufacture, sale or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs, medicines and liquors, and for regulating traffic therein, and for other purposes,' approved June 30, 1906, be, and the same is hereby, amended by striking out the words—

"Third—If in package form, and the contents are stated in terms of weight or measure, they are not plainly and correctly stated on the outside of the package," and inserting in lieu thereof the following:

"Third—If in package form, the quantity of the contents be not plainly and conspicuously marked on the outside of the package in terms of weight, measure or numerical count; provided, however, that reasonable variations shall be permitted, and tolerances shall be established by rules and regulations made in accordance with the provisions of this act.

"Section 2—That this act shall take effect and be in force from and after its passage; provided, however, that no penalty or fine, imprisonment, or confiscation shall be enforced for any violation of its provisions as to domestic products prepared or foreign products imported prior to twelve months after its passage."

The changes made in the bill are found chiefly in the proviso at the end of Section 1. After the word "act," which now closes the proviso, the following words were omitted "which shall not in the average reduce the weight of the measure or numerical count below that marked on said package."

Indiana Food Law is Upheld.

The Indiana pure food law of 1907 was upheld June 7 as constitutional by the United States Supreme Court. The principle was announced that states may enact such measures without interfering with the Federal pure food and drugs act of 1906. The Indiana case has been regarded as a test of the validity of all state pure food legislation.

Justice Hughes, announcing the unanimous decision, said a state had a right to compel a statement of ingredients of an article. He said this was what the Indiana law required, and therefore it did not interfere with the Federal law which dealt with "false and misleading" labeling.

The Federal law, it was added, did not cover the entire field, but left certain powers to the states in the regulation of interstate commerce in foods. The case was that of the appeal of Marion W. Savage, owner of the International Stock Food Company of Minnesota, from the decision of the Supreme Court of Indiana in his action brought against the state chemist of Indiana. It involved the right of the Indiana chemist to require that a condimental stock food shipped by Savage from Minneapolis into the state of Indiana conform to the Indiana law covering stock foods. The principle at law involved was the right of the state to exercise its police power over goods shipped in interstate commerce.

Minnesota Oleo Law Unconstitutional.

The oleomargarine law passed at the last session of the Minnesota Legislature, prohibiting the coloring of "oleo" to make it resemble butter, is unconstitutional. This was decided May 31 by the State Supreme Court in the case brought

by the state against Ole Hanson, a Mankato (Minn.) merchant.

In its decision the Supreme Court said:

"Oleo may be made of several different shades. The article that the defendant was convicted of selling was intentionally made of a deeper yellow. The motive is plain—the consumer will not buy the lighter colored article. The sales of this are but 10 per cent of the yellow article, while the price is the same. There can be, however, no intent to deceive the purchaser or consumer, as the provisions of the law concerning labels on packages and wrappers are fully complied with."

The case was fought by a Chicago packing firm.

Indiana Benzoate of Soda Decision Excepted To.

Attorneys for the Indiana State Board of Health on May 20 filed a bill of exceptions in the Federal Court to a report of Edward Daniels, Master in Chancery, in a suit brought to test the powers of the board to prevent the use of benzoate of soda in food products. Mr. Daniels held that the board could prevent the use and that it is injurious, but that other findings did not agree with the belief of the Health Board. The bill avers that the Master erred in holding that the Williams Company and the Curtice Company, against which the action was brought, acted in good faith when they labeled their products to contain one-tenth of one per cent of sodium benzoate, a percentage which some authorities hold is not harmful. It is averred also that the Master erred in finding that benzoic acid is not poisonous. Other technical issues are involved in the exceptions.

TWO SOUTHERN FOOD OFFICIALS.

W. A. McRae, whose portrait we present herewith, has been elected Commissioner of Agriculture of Florida, to succeed B. E. McLin, who died suddenly on January 31 of heart failure, while in the performance of the duties of his



W. A. McRAE,
Commissioner of Agriculture, Florida.

office. Mr. McLin had been three times elected to the office of Commissioner of Agriculture without opposition, and at the time of his death was a candidate to succeed himself without opposition.

George B. Taylor, Assistant Food Commissioner and Analyst of Louisiana, is one of the busy men of the official food world. His duties include food, dairy and drug inspection work, the direction of a force of sanitary inspectors, the investigation of the water local supply of the state, the institution of prosecution under the food, drug and sanitary



GEORGE B. TAYLOR,
Assistant Food Commissioner, Louisiana.

laws and the supervision of the work of an extensive state laboratory.

POISONING FROM SPOILED MEATS.

The accidental poisoning of some forty-five destitute men in Berlin some months ago, which horrified and shocked the civilized world, aroused the interest of the scientific world and induced Dr. I. Bürger to investigate the case and present it to the world in an article published in the *Illustrirte Zeitung* of Berlin. The victims of the fatality had eaten a quantity of spoiled herring, given them in charity by a fishmonger. Dr. Bürger's study of the case shows among other things, that poisoning, due to meat, is generally spoken of as "ptomain" poisoning; but this term is frequently inaccurate, most of the trouble being due to germs which develop in tainted meat, or even sometimes in healthy tissue. Outbreaks of such poisoning occur from time to time, and statistics show them to be more common in rural neighborhoods than in cities, being chiefly found in the latter in hotels and boarding houses, and in institutions such as hospitals, asylums and orphanages. There are three classes of poisoning from "spoiled" meat, fish, etc. The first class is occasioned by bacteria similar to the typhus bacillus. These may have entered the tissues of the infected animal while living. They are very tiny, and the use of the microscope to determine their presence and number is absolutely essential. If the meat from an animal even very slightly infected is kept under improper conditions, these bacteria multiply with tremendous rapidity, especially in warm summer weather.

But even meat from a perfectly healthy animal may become infected with these bacteria. Some of the principal methods of such infection enumerated by Dr. Bürger are by unclean handling, by the excreta of the rats and mice which commonly haunt slaughterhouses, by contact with impure water or ice (in which the bacillus may retain its vitality for months), or by flies, which have been shown by the experiments of Dr. Ficker of Berlin to carry around with them living germs for weeks at a time. Fish offer an even more favorable breeding ground than meat for such bacteria, and other foods, such as milk, cheese, bread, cake, vegetables and preserves may be similarly infected. We read:

"The symptoms of this first group resemble at times those

of a more or less severe intestinal catarrh, and at times those of typhus fever or cholera. An autopsy reveals little. The mucous membrane of stomach and intestines is usually somewhat swollen and shows tiny hemorrhages.

"A second group of poisonings comes from decayed foods, especially meat. These are comparatively rare, because the offensive odor acts as a warning. It is important to know that boiling does *not* destroy the active principle of the poison, either in these cases or those of the first group, a fact not generally known. Moreover, there may be a degree of decay injurious to health without the presence of a foul odor, especially in decaying meat sausages or salt meat. Also, the color of the meat may remain unaltered, though usually it takes on a greenish or yellowish-gray tone."

The third class of poisoning comes from meat infected by a specific organism, the *bacillus botulinus*, and it is to this that the lodging house fatalities are ascribed. This is colloquially known as "sausage poisoning," since the first cases observed were caused by infected sausage. It is now recognized that it may proceed from infected ham, smoked or salted fish, tinned meats and fish, etc. While cases of meat poisoning have increased on the whole during the last decade, cases of this "botulism" have decreased. The rod-shaped *botulinus* bacillus to which it is due, was discovered by Van Ermingem. It has very slight power of motion, and grows only where oxygen is excluded. Under certain conditions it forms oval spores at the end of the rod. This bacillus is not in itself dangerous to the human organism, since it does not proliferate in the body, as is the case with the diphtheria, typhus or cholera bacillus, and with most others which produce illness. The *botulinus* grows only on dead flesh, outside the human body, and it is in such conditions that it elaborates its extraordinarily fatal poison. Consequently, it is not contagious or infectious, but is capable of injuring only those who have taken the food in which it grows. Hence, there is no need of isolating the sick, and "epidemics" disappear as suddenly as they arise. Further:

"The time elapsing between partaking of the food and the appearance of symptoms of illness varies according to the individual and to the amount of poison absorbed. Occasionally it has been observed that only a few minutes separated the swallowing of the poisoned food from disturbances of digestion, such as active nausea, a feeling of illness, and 'colicky' pains. In other cases the digestive disturbances were delayed for several hours, or were entirely absent.

"The most marked feature is usually the effect on the eye—the dilatation of the pupil, the inability to read, seeing double, paralysis of the upper eyelid, etc. To this is frequently added dryness of the throat, hoarseness, difficulty in swallowing, and hardness of hearing.

"Fever is usually lacking at the beginning, or, if present, is slight. It often increases as the disease progresses, when complications ensue, such as inflammation of the lungs, which is frequent. The gaze is apt to be very rigid, because of the immovability of the eyeball. The expression of the face is sometimes grotesque, and is mask-like because of the disturbance of the power of motion of the facial muscles.

"The attempt to drink may be accompanied by signs of suffocation. Sometimes there is a croup-like cough. * * * In severe cases convalescence is very slow, the invalid tires with little exertion, and is not fit to work for months.

"Death occurs in about 40 per cent of all cases, and often in the course of twenty-four hours.

"The diagnosis of 'botulism' is unfortunately rather difficult. Where it is suspected, tests of the food should be made as speedily as possible, since thus the tainted meat may be seized and the epidemic checked."

INDIANA LETTER.

(From a Staff Correspondent.)

INDIANAPOLIS, IND., June 10, 1912.

Although the State Food and Drug Department inspectors in Indiana made more than one thousand inspections in the state during May and caused to be examined in the state laboratories one hundred and forty-one samples of suspected foods, only two prosecutions were brought, and in both these convictions were had. One of these was for the misbranding of soft drinks, and another was for maintaining an insanitary slaughter house. Only two prosecutions were brought during the preceding month, and the state authorities maintain that the condition is due to an improvement in state food affairs that leaves little ground for action in the courts. As a result of the bettered condition as concerns branding, use of preservatives, etc., the authorities are now giving their chief attention to the sanitary conditions of establishments, particularly dairies, many of which have been condemned. In

every case of condemnation, either the dairyman went out of business or remedied the defects. In no case has it been necessary to go to court on such matters. By the system now in force, the notices of condemnation are left to local authorities for enforcement, and the state department follows the condemnation by a visit a month later to see what has been done.

Soda fountain fruits, ground meats, ice creams, milks, and vinegars were the only foods found illegal during the month, and only ten of 141 suspected samples were found not according to law. Of 1,173 inspections of buildings, only thirteen were found bad, and only fourteen graded excellent.

The retail grocers of Indianapolis, the largest city of the state, have entered state politics. In the recent primary election for the selection of candidates for the general assembly, the grocers selected candidates, pledged them to legislation favorable to the collection of grocers' bills, and nominated their entire slate. The candidates assured the grocers, at the latter's solicitation, that they would not seek to injure the state food laws.

Dr. Mary E. Pennington, cold storage expert for the United State Department of Agriculture, recently made a survey of cold storage conditions in Indianapolis, and pronounced them satisfactory, when taken into consideration with certain improvements under way, but denounced methods found in various places for preserving dressed chickens by placing them in ice cold water. She advocated freezing as a better method. She also opposed scalding chickens in dressing, as it destroyed the poultry flavor and made a tender fowl tough.

Indianapolis has introduced the civil service method in the selection of city meat inspectors, and is finding the method highly satisfactory. By that means, skilled inspectors are obtained, where heretofore the places were given out to favored politicians.

The employees of the Pennsylvania Railroad Company, living in this city, are just completing their fifth month at co-operative buying of foodstuffs, and expect to continue the plan indefinitely, as they claim they can effect considerable saving by the co-operation. The plan was started when produce was high during the late winter months. The purchases of the group now average about \$1,200 a month.

With the opening of the canning season this year, the state factory inspection will join with the State Board of Health in enforcing sanitary conditions in the various factories in the state. The co-operation was decided upon in a recent conference, when the situation was gone over carefully.

Mayor Samuel Lewis Shank, of Indianapolis, who sprang into national prominence last winter when he bought potatoes and sold them to consumers at considerable less than local prices, has announced his candidacy for the nomination for Governor and is making his race on the strength of the popularity his plan got him at that time. He is appealing to the farmers of the state as well as to the consumers on the basis of a direct dealing platform, doing away with the middleman.

WHAT ARE FOOD STANDARDS?

What are standards for any food products? Standards, especially in the United States, are absolutely the personal arbitrary opinion of a single individual or of a limited number of individuals grouped together, often political appointees, in whose control for the time being are the powers to promulgate rules and regulations as to the composition, manufacture and treatment of some or all food products, always subject to the change of opinion of the individuals or groups, due to influence exerted, commercial or political, and consequent modification of the standards with such change of opinion or change in political administration.

This accounts to a large extent why food standards, especially in the United States, are being changed continuously, and why they vary so widely in even neighboring sections. Standards, like the tariff, are often local issues. These personal arbitrary standards may or may not be endorsed by and be satisfactory to the producer, manufacturer and consumer, or any of them, and may or may not be in accordance with actual commercial customs or conditions.

I am not in favor of a fixed standard for manufactured products. I am strongly in favor of a correct label, stating in plain language the quality of the commodity and the amount of the active ingredients it contains, and such other information as artificial, or colored or compounded, with the date of manufacture for certain commodities. The label should give all the required information that will enable the final consumer, the retail buyer, to determine for herself or himself what she or he is getting and paying for, both as to quality and quantity of the commodity.—Dr. Edward Gude-man in *Ice Cream Trade Journal*.

United States Department of Agriculture

OFFICE OF THE SECRETARY.
BOARD OF FOOD AND DRUG INSPECTION.

FOOD INSPECTION DECISION 144.

CANNED FOODS: USE OF WATER, BRINE, SIRUP, SAUCE AND SIMILAR SUBSTANCES IN THE PREPARATION THEREOF.

The can in canned food products serves not only as a container but also as an index of the quantity of food therein. It should be as full of food as is practicable for packing and processing without injuring the quality or appearance of the contents. Some food products may be canned without the addition of any other substances whatsoever—for example, tomatoes. The addition of water in such instances is deemed adulteration. Other foods may require the addition of water, brine, sugar, or sirup, either to combine with the food for its proper preparation or for the purpose of sterilization—for instance, peas. In this case the can should be packed as full as practicable with the peas and should contain only sufficient liquor to fill the interstices and cover the product.

Canned foods, therefore, will be deemed to be adulterated if they are found to contain water, brine, sirup, sauce or similar substances in excess of the amount necessary for their proper preparation and sterilization.

It has come to the notice of the department that pulp prepared from trimmings, cores, and other waste material is sometimes added to canned tomatoes. It is the opinion of the board that pulp is not a normal ingredient of canned tomatoes, and such addition is therefore adulteration. It is the further opinion of the board that the addition of tomato juice in excess of the amount present in the tomatoes used is adulteration—that is, if in the canning of a lot of tomatoes more juice be added than is present in that lot, the same will be considered an adulteration.

R. E. DOOLITTLE,
A. S. MITCHELL,

Board of Food and Drug Inspection.

Approved:

JAMES WILSON,

Secretary of Agriculture.

Washington, D. C., May 22, 1912.

A GOVERNMENT PRONOUNCEMENT ON CANNED GOODS.

In connection with the promulgation of Food Inspection Decision No. 144, on canned goods, the Bureau of Chemistry has issued the following circular on the same general subject:

"The label should tell the truth in terms which are direct and easily understood. It should give the name of the article, the grade, by whom packed and where packed, or the name of the distributor. Neither the names nor the illustrations used should be misleading. A picture of green peas in pods in clear relief and subdued type stating that the contents are soaked, is hardly appropriate. If given a geographical name it must be the true one. Corn grown in Iowa is not Maine corn though obtained from Maine seed. The use of such terms as 'Maine style' for cream corn is in reality only an attempt to circumvent the intent of a true label.

"There are no fixed standards for canned goods, though the canner and the trade do recognize and describe certain qualities in jobbing, and prices are made accordingly. The consumer has not been educated to know these differences. The labels usually carry descriptive terms implying superlative quality, as extra select, extra choice, extra fancy, select, choice, fancy, extra standard, and, less commonly, standard. There are too many designations for the same product, and, furthermore, Mr. A.'s fancy may not be the same as Mr. B.'s.

"The grade may not be the same in two consecutive seasons, due to drouth, excess of rain, intense heat, or other cause; neither may it mean the same in different sections of the country in a normal year. In other words, at the present time the grade does not have a fixed character.

"Again when the sirup is one of the factors in grading a product, that fact should be given, though it is not required. A consumer cannot go to the grocery and buy peaches in a 40 degree, 30 degree or 20 degree sirup, though the packers use care in preparing such sirups to use for their different grades. Such designations as heavy, medium and light sirup are also inadequate. A heavy sirup may mean anything between 35 degrees and 60 degrees, a medium between 20

degrees and 45 degrees, and a light between 10 degrees and 30 degrees, depending on who uses it. These variations are too wide to be carried under such elastic terms.

"There is no doubt that some fruit packed in light or 20 degree sirup is just as good as that put up in medium or 30 degree sirup, but there can be no harm done by giving the exact facts. On general principles, if it is worth while for the packer to select his stock carefully and put up different grades, the consumer should know how to select them.

"A can of any food should be as full as it can reasonably be packed and processed without injuring either the quality or appearance of the product. There is such a thing as overfilling as well as underfilling, and one is as much a fault as the other. All foods packed in a liquid or semi-liquid condition, or as solids surrounded by liquid, should fill to within one-half inch of the top, and when free liquid is present it should cover the solids. Corn or peas an inch below the top would be a slack fill, even though covered with liquid.

"The fruits present a more perplexing problem, depending upon the size of the pieces and the degree to which they shrink in the sirup. The very choice large peaches, having only five or six pieces to the can, will weigh only eighteen or nineteen ounces and be as full as they can be sealed. A slightly smaller size, of seven to nine pieces to the can, will weigh 20 ounces, and for more than ten pieces the weight will be from 21 to 22 ounces. After they have been cooked in the sirup the pieces will soften, the weight will change, and the fill will not be the same, though in all the amount was as much as could be sealed, if the cans be judged upon weight of the solids alone, the highest grade would be short weight, the quality must also be considered. The presence of only 18 or 19 ounces of low-grade peaches would be manifestly slack filled.

"Soft berries, like strawberries and raspberries, if filled as full as the can will hold and sirup or water added, will appear only one-third to one-half full of solids upon opening and considerable variation will occur, depending upon their condition. Some foods can be packed so as to give a fairly uniform net weight upon opening, but with others the volume of solids and its own liquid is a fairer measure.

"The buyer is entitled to a full can and most packers try to furnish it. The net weights given for several products at the close of the descriptions of processing are intended to represent the minimum; the amount actually obtained should exceed these figures. A lower net weight may be regarded as slack filled.

"In making a comparison of the cost of canned and fresh products of the same kind, a number of factors must be taken into consideration. First, the cost of the raw material and the waste when purchased in the small quantity used in a single meal; second, the cost of labor and preparation used in making it ready for the table. It is obvious that a comparison can not be made for time, as the canned article may be had throughout the year and the fresh for only a limited season, and purchase of a product out of season is usually at a high cost. In making a purchase of either the fresh or canned article, the smaller the quantity the higher the price; the single can costs more than if bought by the dozen or case, as does the half peck of apples compared with the bushel or barrel.

"Take, for example, a No. 3 and a No. 10 can of whole apples; the former usually retails for 10 cents and the latter for 25 to 30 cents. Those who can use the latter have a decided advantage, as it will contain between four and five times as much as the former. Only in apple districts, and for short seasons, can the same quantity of the fresh fruit be purchased at the same price. Wherever the fresh fruit sells at the rate of \$2 per bushel when purchased by the peck, and this is below average prevailing prices in cities, the canned article is the cheaper.

"In the raw stock there is loss in peel and core, from bruises, short weight, and often rot, all of which is eliminated in the can. The canned variety usually cooks better, and for the pie or dumping is generally the cheaper.

"Neither corn nor peas can be purchased in large cities, nor in many smaller ones, as cheaply as in the can, and then they are not so fresh. In up-to-date canneries the article is put up the day it is picked, while three or four days may elapse from the time the raw produce is harvested in the garden (in transportation, in the hands of the commission house and in the grocery) before it reaches the consumer's table. It requires nearly two quarts of good peas in the pod to make one can, and often more than three quarts of the heavy-podded variety found in the market. At no time can the smaller peas nor fine-kernelled corn be purchased as cheaply as in the can.

"It requires two bushels of good peas to yield one No. 2

can of petit pois, or one bushel to yield one can of extra sifted, and from four to eight ears of small corn to make one can. The pea and corn packer, however, handles tons of these crops especially grown for him, and uses the highest class of automatic labor-saving machinery in all operations, so that the real labor on a single can is very small. The consumer cannot purchase peas at 30 to 50 cents per bushel, nor corn at \$9 to \$12 per ton, and these represent initial costs in large quantities.

"In fruits, as berries, the consumer must figure that a No. 2 can will require not less than 12 ounces of well-selected fruit, and for a No. 2½ can (22 ounces). The latter is equivalent to two boxes of berries by the time they are picked over. Syrup is added to the can, which offsets the sugar necessary for the fresh fruit.

"There is a vast difference in canned foods, and, as in many other lines of commerce, the cheapest in price is often the most expensive. The can of water-packed tomatoes, the green hard pears, the handful of berries in a pint of water, or poor quality beans disguised with tomato dressing and offered at a low price, when measured by their food value are the highest. Goods which are strictly standard should give the best food value for the cost. Peas, corn, beans and tomatoes which are good field run, but which lack the uniformity and niceties which are necessary for the fancy article, will have all the nutritive properties, and be just as palatable, but cost several cents less per dozen.

"There is much that is pure fad in the purchase of canned foods; the asparagus must be white and the fewest possible stalks in a can; the green is just as good and a medium number of stalks furnish a more edible product. The little peas are, naturally, the costly ones, for less than 5 per cent are of that kind; the large ones are the better flavored and more nutritious, and one-third the cost. Similar examples might be cited of a number of other products. Canned foods should be purchased by the dozen or case, straight or in mixed lots, rather than by single cans."

THE 1911 YEAREOOK OF THE DEPARTMENT OF AGRICULTURE.

The eighteenth volume of the Yearbook (1911) has just been issued by the United States Department of Agriculture. In appearance and make-up it differs but little from its predecessors. It contains thirty-one articles, sixty-seven full-page illustrations, of which nine are colored, and twenty text figures.

The department's appreciation of the services Seaman Asahel Knapp rendered to agriculture during his long career is indicated in the selection of his portrait as a frontispiece, and in printing his biography as the first article in the volume.

The fifteenth annual report of the secretary for the fiscal year ended June 30, 1911, occupies the first 112 pages and gives a "general report of the operations of the department," which under the law must form a part of the volume. This report supplemented by the statistical matter found in an appendix of 200 pages gives a more complete and comprehensive summary of agricultural conditions in the United States than can be found in any other single publication.

The 354 pages comprising the body of the volume contain the thirty articles contributed by the members of the scientific force of the department, and present data upon many of the important questions now occupying the attention of agriculturists, topics equally vital to the agricultural and urban population, both as producers and consumers of the food-stuffs of the nation.

The importance of the forests to the agricultural welfare of the country and the prominence of forestry in the department's work are reflected in two papers, entitled "Tree planting by farmers," and "The business aspect of national forest timber sales."

Closely connected with this work and especially interesting to the residents of many parts of the West is the cultivating of the arid and semi-arid soils of that region; hence the papers relating to dry farming and irrigation, entitled "Some misconceptions concerning dry farming," "The water economy of dry land crops," "Possibilities and need of supplemental irrigation in the humid region," "The value of snow surveys as related to irrigation projects," and "The present outlook for irrigation farming," will prove of value to farmers and other dwellers in that section of the country.

The two papers on the "Primary principles in the prevention and treatment of disease in poultry," and "The handling and marketing of eggs," together with the articles on "The reduction of waste in marketing," and the "Commercial methods of canning meats, will prove of interest not only

to the general public but to those whose occupations are more directly connected with some phase of that work. The deservedly large place which the general farmer, the fruit grower, the trucker, and the grower of special crops hold in the thought and activities of the department is demonstrated by the articles on the "Promising new fruits," "Seasonal distribution of labor on the farm," "Some results of the farmers' co-operative demonstration work," "Relations in the corn belt," "Cotton improvement on a community basis," "The Weather Bureau and the cranberry industry," "Plant introduction by the plant breeders," "Relation between rotation systems and insect injury in the South," and "The value of predaceous beetles in destroying insect pests."

"Decomposition and its microscopical detection in some food products," "Green vegetables and their use in the diet," and "A new respiration calorimeter for use in the study of problems of vegetable physiology," will appeal very strongly to the student of methods of improving the food consumed by the people.

Other papers of current interest submitted by different bureaus, entitled "Our mid-Pacific bird reservation," "Bird enemies of the codling moth," "Crawfish as crop destroyers," "Fibers used for binder twine," "Important American soils," the "Subsoil waters of central United States," and "The winds of the United States and their economic uses," complete the department's current contribution in the new Yearbook.

The larger part of the edition of this volume is reserved by Congress for distribution by senators, representatives, delegates, in Congress, and resident commissioners, and the department's limited quota is reserved principally for its voluntary correspondents for whom its entire supply is insufficient to furnish one copy to each.

BOTTLED WATER IN OKLAHOMA.

Improvement in the conditions under which water is bottled and sold in the state of Oklahoma is sought as a result of an investigation of the bottled water situation in the state ordered by Dr. J. C. Mahr, Commissioner of Health. In a statement by U. S. Russell, State Chemist, occurs the following:

"Developments show that little or no regard for public health is displayed in the methods employed by the various water bottlers in Oklahoma City, and so long as the public is subjected to use of water from bottles which have not been properly sterilized, the danger is great.

"For example, a water bottle used in a negro restaurant, may go next to a home. Under present methods of bottling, the second user of this water receptacle is not protected, for rags and swabs hurriedly applied are largely used in the cleansing, by most of the Oklahoma City bottlers. Little attention is given to sterilization. Unless water bottles are scalded, and otherwise cleansed perfectly, the danger from the bottle is as great as any danger from impure water itself could be.

"The State Health Department has no endorsement for any particular water, but it insists that better bottling methods are necessary to the safety of the Oklahoma City public."

FOOD PRICES AVERAGE HIGHER THAN EVER.

It costs more to live in this, the month of June, 1912, than ever before in the history of the United States, except perhaps during war times. Prices were high a year ago, but today they are on the average nearly 10 per cent higher yet, according to trade authority quotations.

Food products are the highest on record. Meat, eggs, butter, fish, potatoes, coffee, tea, sugar, salt, molasses, rice, beans and peas average 22 per cent higher; wheat, corn, oats, barley, flour, etc., 33 per cent higher.

Fruits are the only things good to eat that have grown cheaper during the last twelve months, but they are still higher than in 1910. Leather products cost 12 per cent and chemicals and drugs 13 per cent more than a year ago. Textile goods, however, are a trifle cheaper.

The average increase in food products is nearly 20 per cent, which means that the housewife must pay \$6 to fill a market basket that only cost her \$5 to fill in June, 1911. In other words, \$1 will only buy five-sixths as much as it did a year ago.

The biggest advances have been in meat products, beef, 26 per cent; hog products, 40 per cent and mutton over 50 per cent. Dealers lay the increase to last year's poor hay crop and the general high cost of animal provender. Poor crops are also held responsible for dearer breadstuffs.—*New York Journal of Commerce.*

THE AMERICAN FOOD JOURNAL



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DR. WILEY'S "INTEGRITY."

This is the story of the opening of the eyes of one editor. The editor in question pushes a pencil on the St. Louis *Republic*. The story is unfinished because after the editor opened his eyes he may have closed them again to a narrow squint when he got some further information of an eye-opening character. He does not print the second installment of the information he got. And again, he may have closed his eyes utterly, so that only a glimmering of truth has got to his brain.

The story opens beautifully. On April 25 the St. Louis *Republic* printed under the caption "Dr. Wiley as Jekyll and Hyde" an editorial in these words:

We must cite Dr. Wiley, late of the Bureau of Chemistry, as a frightful example of the power of privilege.

He spent almost a lifetime in the Department of Agriculture in hand-to-hand conflict with influential manufacturers who, because there was a profit in it for themselves, could see nothing wrong in adulterating or embalming food. On this issue his moral and intellectual faculties were very keen. So far as we know he never abated a point in his antagonism to practices that he knew to be dishonest and harmful.

Now that he is a private citizen, thanks to the hostility of the food interests, he has filed a brief with the Senate Committee on Finance protesting against the House bill removing the tariff tax from sugar. In his argument he reasons not like Dr. Wiley of the Bureau of Chemistry, but like an officer of the Sugar Trust. He pleads for a select and favored coterie of cane and beet-sugar growers just as the high-priced attorneys who used to appear before him as Chief Chemist pleaded for the food manufacturers who labeled their goods falsely.

As a professional man, Dr. Wiley could not see why anybody should be permitted by law to rob his fellow-citizens. As "a man who has been interested all his life in the sugar industry" he cannot see why it is not perfectly proper for him and his associates to plunder their fellow-citizens by means of the tariff.

We are disappointed in Dr. Wiley.

This editorial attracted the attention of Mr. John F. Queeny of St. Louis, who wrote the editor of the *Republic*, under date of May 3, the following communication, which was duly printed:

To the Editor of the *Republic*: We read with much interest the editorial in your issue of April 25, titled "Dr. Wiley as Jekyll and Hyde." Would it not be well for you to inquire what interest Dr. Wiley has had in the sugar industry, since he has never been a producer? You have no doubt heard of the large fee which he received from the sugar people some years ago, and of course you are aware of his actions

against the corn products companies and against the saccharine manufacturers, which was in the interest of the sugar industry rather than the interest of science or the consumer. We believe that before long the intelligent editors of the country will come to know Wiley as we have known him. We noted in the past with much regret, the various editorials in your paper from time to time favorable to Wiley, and were strongly inclined to write you regarding same, but it has turned out for the best, as you have discovered him yourself, and it is a pity the public at large does not know him for what he is. The truth does eventually come out, however.

JOHN F. QUEENY.

Then Dr. Wiley came to the rescue of his reputation. On May 9th he wrote to the editor of the *Republic* from Washington a letter which was published, and which was calculated to extinguish Mr. Queeny. His letter was in these words:

To the Editor of *Republic*: I did not have the opportunity to read an editorial in your issue of April 25, on which Mr. John F. Queeny comments in a letter published in your columns, and dated St. Louis, May 3, 1912.

In this letter Mr. Queeny makes this statement: "You have no doubt heard of the large fee which he received from the sugar people some years ago." I would be very glad indeed to have some knowledge of that fee myself. Please ask Mr. Queeny to give you, for publication, full details.

If I understand the matter, a statement of this kind is meant to reflect on my honesty and integrity, and reputable newspapers, I believe, do not make such charges or print them without evidence to substantiate them. It is therefore only just to me, as well as to you, that Mr. Queeny should make good.

I would be glad if you would print this in your newspaper, and also ask Mr. Queeny to immediately submit statements in justification of his charge.

H. W. WILEY.

So far, so good. Dr. Wiley, who has so often vindicated himself, has apparently turned the trick again. Mr. Queeny, indeed, made a reply, but as the *Republic* did not see fit to print it, he is utterly squelched. Mr. Queeny has submitted his reply, in the form of a copy of a letter he addressed to the editor of the *Republic* on May 23, to the AMERICAN FOOD JOURNAL. It is a pretty good document and ought to meet Dr. Wiley's requirements or satisfy the curiosity of any reader of the *Republic* who was at all concerned about Mr. Queeny's willingness to make good his statements. We reproduce it herewith:

To the Editor of the *Republic*: The letter of H. W. Wiley dated Washington, May 9th, 1912, and published in your edition of the 18th inst. is so adroitly worded as to create the impression that he indignantly resents the suggestion that he had ever received a fee from private interests while he was in the employ of the Government; whereas, if pinned down he would probably contend that the only issue he intended to make was that the fee in question was a large one.

The fee to which I referred was one which he received from the Arbuckles, a well known sugar concern; and I would like for you to inquire of Dr. Wiley whether he wishes to deny having received a fee from them, directly or indirectly, for appearing as an expert for them in one of their cases.

Dr. Wiley was continuously in the employ of the Government from about 1883 to about two months ago, when he resigned, and I should like to have you ask him whether he is willing to make a statement, for the benefit of the readers of the *Republic*, as to the number and amounts of fees received by him from private interests during that period.

Dr. Wiley suggests that I "make good," and I do so by referring to the Arbuckle fee, but it seems strange that a man who has never "made good" himself should ask anyone else to "make good."

Though Dr. Wiley received fees from private interests as an "expert," he was unable to qualify as an expert when the Government needed his services in pure food cases.

JOHN F. QUEENY.

It is a pity this letter was not printed by the editor to whom it was addressed instead of being tossed in the waste basket or mayhap locked up in his desk. It might have opened up a line of investigation not inopportune even at this late date. Dr. Wiley has

lately gone into the production of muck-raking magazine stuff. He still has a large number of followers who implicitly believe in his "integrity"—the same article that he suggested Mr. Queeny was attacking. Now in spite of the mystery of his private fortune and in spite of the numerous surface evidences that there might be something wrong with Dr. Wiley's "integrity," the AMERICAN FOOD JOURNAL has refrained hitherto from suggesting that it was not intact. But here is a statement in cold terms by a man who evidently knows enough to form an interesting basis for such an investigation of Dr. Wiley's acts as chief of the Bureau of Chemistry as we have several times insisted upon for other reasons.

Dr. Wiley is stated to have received money, directly or indirectly, from a private interest as pay for "expert" services in a case in court, services that he has declined to perform for the Government from which he received a salary on several more or less important occasions, and upon excuses that were merely cloaks for his lack of "expert" knowledge. There is a further hint that he has received other fees from other private interests. If these private connections existed, they may have had a greater or less bearing on Dr. Wiley's administration of the affairs of the Bureau of Chemistry. They might explain his fortune of \$300,000.

It is a pity, to repeat our remark, that the editor of the *St. Louis Republic* did not see fit to publish Mr. Queeny's letter.

A USEFUL BOARD OF HEALTH.

There are some admirable features of the recently issued biennial report of the Louisiana State Board of Health, which has direct jurisdiction over food matters in the state, that are worthy at least of observation by food officials in other states. The report covers all of the work done by the board during 1910 and 1911. Principally it emphasizes the close connection of hygiene and sanitation with food control. In many states the board of health are given the administration of food laws, generally as a matter of course or because a special commission for food control is deemed unnecessary. In other states the food law is administered by the state agricultural authorities, while in others a food and dairy division of one or other of these bodies will order things pertaining to food manufacture and purveying. For the rest, a specially organized commission has charge of food, drug and dairy matters. These are all questions of state administration and state policy. Whichever is best as an administrative method the student of such matters will perhaps more readily determine for himself, but Louisiana presents an excellent example of the policy of joining food control work with hygiene and sanitation under the jurisdiction of the State Board of Health.

A considerable number of pages in the report refer to the health train, the only institution of its kind in the United States, and which has been mentioned hitherto in the pages of the AMERICAN FOOD JOURNAL. President Dowling, after stating the problem confronting the board, a problem perhaps made more acute by the anxious and clear-sighted attitude of its members, goes on to state: "Believing that the people of Louisiana ever are receptive and responsive to efforts for social improvement, it was thought wise by the Board of Health to inaugurate, as an initial meas-

ure in the interest of public welfare, an active, statewide health campaign. It was an experiment new in health annals. As a preparation for the work hundreds of letters were sent from the office to physicians, expert sanitarians, dentists, presidents of philanthropic organizations and educational institutions, architects, sanitary engineers, and business men in all parts of the United States, asking for data as to measures adopted and results attained. Much valuable information, not yet published in book form, the burden of the experience of man engaged in active work, was gathered and facts digested and compiled for use. To disseminate these facts in the manner most practical, acceptable and economical became the problem." Then follows an account of the measures taken to carry out the plan, showing how the officials of three railroads co-operated to furnish a train and transport it seven thousand miles through Louisiana without expense to the board or the state. The equipment of the train and methods of demonstration are described minutely and entertainingly and the exhibits are shown to be classified under five heads, namely, preventable diseases; pure food; sanitary necessities; model household sanitary equipment; personal hygiene and sanitary equipment. All the lessons inculcated by these exhibits are shown to be along the lines of health education as a necessity of physical welfare and material growth, and the results arrived at show that the work has had not only the greatest welcome and interest on the part of the people of the state but that it has done incalculable good. It has demonstrated the closeness of the relation between pure food and health and the importance of household sanitation and improved domestic conditions as an adjunct to pure food and intelligent dietary in promoting health.

The itinerary of the health train was so intelligently arranged that notices of its visits to the various towns throughout the state were given sufficiently far in advance to enable every person interested to take advantage of its presence in the community.

The report of the State Analyst, George B. Taylor, would indicate that much inspection work is done under his auspices. Inspection constitutes the heavy part of the work of any board having jurisdiction over food, drug and dairy supplies and sanitary conditions, and the amount of this work done as shown in the report of the analyst would indicate that he is a very busy official. In addition to inspection for violation of the law covering foods and drugs, extensive investigations of the water supply of the state have been made, and sanitary conditions in every community have not only been investigated but vastly improved by educational means first and where such means were found ineffective, by the pressure of legal prosecutions. This work has extended to all classes of stores, markets, dairies, sugar mills, factories and places where any possibility of insanitary conditions might exist, and score cards upon which results of inspection were recorded have been made for practically every place in the state. Under this system a vast improvement in sanitary conditions in Louisiana must inevitably have been accomplished.

The report also includes details of the work of the Secretary of the Board of Health, Dr. E. S. Kelly, of the Department of Vital Statistics, in charge of Dr. P. T. Talbot; of the State Bacteriologist, Dr. P. E. Archinard, and of the State Sanitarian, Dr. S. D.

Porter. This last office covers apparently only the subject of contagious diseases. An appendix of the report is given to the work of the State Board of Health and local health authorities in co-operation with the Rockefeller Sanitary Commission in combating the hookworm disease. So it will be seen that Louisiana has a very efficient State Board of Health with a wide range of duties which it is performing acceptably.

THE OWEN BILL AGAIN.

Document No. 493 of the United States Senate is a "Memorial Relating to the Conservation of Human Life as Contemplated by Bill (S. 1) Providing for a United States Public Health Service." It is prepared by Prof. Irving Fisher of Yale University, President of the Committee of One Hundred on National Health, assisted by Miss Emily F. Robbins, Executive Secretary of the committee. The bill providing for a United States public health service is our old friend the Owen bill, reintroduced with some modifications in the present session of Congress. Its text is not given at all in the present document, which is a very good compilation of facts, theories, statements, etc., upon which to base a premise that our national health is in a very bad state.

The connection between this fact and the necessity for giving a bureau or department the administration of certain legislative enactments entirely outside of those clauses establishing the service we do not see. There is no question that such a service devoted to the gathering and dissemination of intelligence touching the public health would be a valuable institution. The advisability of giving those in charge of such a bureau any administrative power is open to serious criticism.

There is no public sentiment in favor of this particular piece of legislation except that manufactured sentiment that depends on the wide circulation of booklets and letters, the free distribution of "boiler plate" to country newspapers, the publication of a long list of names of alleged supporters of the movement in which certain prominent individuals appear, and other methods well known to press agents and the like. There is, moreover, ground for the belief that some of the support of the movement is concealed and of a sinister character—support that regards the Owen bill as an entering wedge for a more active and powerful effort later on.

To locate and define an evil is one thing, to prescribe the remedy is another thing. And to be in a position to prescribe the remedy after locating and defining the evil after its own methods is the ambition of at least one of the organizations supporting the Owen bill and the propaganda for an independent public health service, in the opinion of this journal. This alone is enough to condemn the whole plan out of hand.

The AMERICAN FOOD JOURNAL has hitherto opposed the Owen bill and the general plan to establish a department or bureau of health or an independent governmental health service on the ground mentioned above and for other reasons, which have, we believe, been sufficiently discussed in our columns. One cogent reason for opposing it is found in the proposal to take the Bureau of Chemistry from the Department of Agriculture. The Bureau of Chemistry has general supervision of the laboratories of the agricultural experiment stations which are important parts of the department's organization. To oblige the Depart-

ment of Agriculture to operate these laboratories through a bureau not a part of its own organization and not subject to it would be to seriously handicap its activities. This would be the practical result of the inauguration of the health bureau, and this one evil ought to be sufficient to overthrow the proposition.

CONSUMERS' LEAGUES IN GERMANY AND AMERICA.

An article in the *American Miller*, referring to the decline of small flour mills in Germany consequent upon the consolidation of milling interests and the establishing of large modern mills in big centers of population, speaks of certain "consumers' leagues," and a perusal of the article discloses that these "consumers' leagues" are organizations of actual consumers, formed to buy the necessities of life in community for actual use by the members. The Germans are little given to misbranding their economic organizations. These leagues represent actualities. This is in contradistinction to the National Consumers' League, a fraudulent American organization, which represents no consumers and whose principal occupation is the issuing of certain documents denouncing the Department of Agriculture, which fakements masquerade as resolutions duly passed in regular sessions of the mythical Consumers' League. These "resolutions" have to do with certain alleged acts of the Department of Agriculture and various of its officials in "thwarting" Dr. Wiley, until recently Chief of the Bureau of Chemistry, and have no foundation except upon the hypothesis that the said Wiley is, or was, infallible.

So that anybody accepting the doctrine of the infallibility of Wiley, unless he knows of the emptiness and fraudulence of the Consumers' League, will find exceeding comfort in these resolutions. Until a few days ago, we thought the facts in regard to the Consumers' League were known to the editor of *Colliers' Weekly*, and it may be that this surmise is still correct, upon which latter hypothesis we must conclude a greater mendacity and intention to deceive its readers than we have hitherto credited it with. Its printing of the last set of "resolutions" of the League, in which the resignations of Secretary Wilson, Solicitor McCabe and Dr. F. W. Dunlap of the Board of Food and Drug Inspection are demanded, is explicable on the theory that it either does not know the hollow and irresponsible character of the League, or that it deliberately chooses to deceive its readers into the belief that this Consumers' League is a genuine organization of actual consumers and entitled to credence and confidence as such.

There is no question that such a publication as *Barrels and Bottles*, as an example, knows the character of the Consumers' League, and where information is available to such a paper, it ought to be readily available to *Colliers' Weekly*.

WHERE DOES PROF. LADD STAND?

The food bulletin of the North Dakota Agricultural College for May contains nine pages of matter devoted to mincemeat. There is a quotation from the law of North Dakota, the Standard dictionary definition, a list of fifty-eight samples examined, several tables of chemical, microscopical and bacteriological examinations, and some editorial deductions, all going to prove that mincemeat is not mincemeat without meat. There

are some other conditions imposed by Professor E. F. Ladd, who publishes the bulletin, but none of these are so imperative as the presence of meat.

Now Professor Ladd is editor of the *North Dakota Farmer*, and we presume his editorial connection is not merely nominal. There is abundant evidence of this. Hence we are surprised and alarmed at finding in the pages of the *North Dakota Farmer* an utterly different view of the mincemeat situation than appears in Professor Ladd's other publication, the *Food Bulletin* of the North Dakota Agricultural Experiment Station. The difference is fundamental, too. In the bulletin he advocates—nay, demands—meat. In the *Farmer* he promulgates a standard for mince pies in which meat is conspicuously absent. Here is the mincemeat standard for North Dakota farmers' wives unblushingly urged by Professor Ladd. Contrast its meatlessness with the rigid requirement of meat in the bulletin:

One and one-half cups chopped raisins, one cup sugar, one cup molasses, one cup warm water, one-half cup vinegar, two well beaten eggs, five large crackers rolled fine, one teaspoon each cinnamon and cloves. This makes two large or three small pies.

Of course, we expect Professor Ladd to come up with an explanation. He will doubtless urge that the eggs in his formula furnish the meat element. But no such thin and watery excuse will go with us. We propose to make Professor Ladd come out into the light on this subject and declare one way or the other whether the state of North Dakota is on a meat or no meat basis on the mincemeat question. The subject is too great, the interests of the people of the great commonwealth of North Dakota are too important. There will be no begging the question—no palavering—no Jekyll and Hyde performances. Once for all, we demand where Professor Ladd stands—meat or no meat in our mince pies.

SIXTEENTH ANNUAL CONVENTION OF FOOD OFFICIALS.

The AMERICAN FOOD JOURNAL does not wholly share the apprehension of its Washington correspondent that the proposed division of the Association of State and National Food and Dairy Departments into sections will result in such a breaking up of the association as to permit a resolution indorsing Dr. Bigelow as the successor of Dr. Wiley as chief of the Bureau of Chemistry. In the Department of Agriculture, Wileyism is dead or nearly so, and what resolutions will be passed by the Association of State and National Food and Dairy Departments will doubtless be passed by the convention as a whole and not by individual sections. When Dr. Wiley severed his official connection with the Bureau of Chemistry, he ceased then to have any official standing anywhere, and an attempt to give him a quasi-official standing by promoting the interests of his choice for his successor ought to be met with a stern rebuke. That is what any such effort in the Association of State and National Food and Dairy Departments would undoubtedly meet, and most of the delegates understand that, and that is why no apprehensions of any such attempt are felt by the AMERICAN FOOD JOURNAL.

Plans for the sixteenth annual convention of the association have been practically completed, and a large attendance is assured, both of accredited delegates and visitors. Commissioner Davies, who has conducted the local arrangements in Seattle, has acted

with the officers and the Committee on Arrangements, and the plans for the convention work and the entertainment of visitors are practically complete.

While the plans for the reorganization of the association have not been formally adopted, the work of the convention will be done under the new plan, as the program provides for separate and concurrent sessions of the various sections and President Brown has already appointed presidents and secretaries for them. The committee appointed at the Duluth convention to frame a new constitution was not granted power to act, and the new constitution can only be adopted by the association in regular convention. The appointments of President Brown are doubtless meant to be only temporary, pending formal adoption of the new constitution, which provides for reorganization in sections and separate officers for each section.

The convention dates are July 9th to 12th.

THE SHERMAN ACT.

One of the counsel for the meat packers in the recent case under the Sherman act in Chicago, which resulted in a more complete vindication of the defendants than the public is generally aware of, remarks that the various attempts at the enforcement of the act "have done nothing for the great army of consumers, have not reduced the price of the necessities of life one farthing, but have done more for the legal profession than any other federal law since the foundation of this government." He does not wonder that lawyers like the act, since it has "made more judges, promoted more judges, made more attorneys general, governors and senators than all of the other statutes combined."

The more the Sherman act is contemplated, together with the concomitant attitude of the public mind that it supports, the more one is forced into a belief that the whole basis of our national attitude on the general subject of commercial organizations is fundamentally wrong. The theory in other countries, where commercial progress is much along the same lines as in the United States, is that proper conservation of commercialism, and sound progress in commerce, depends upon the fostering of legitimate combinations, not to control prices adversely to the interests of consumers, but to see that prices do not fall below a level upon which all concerned in production may live.

Renewed prosecutions under the Sherman act will do nothing but demonstrate the failure and inadequacy of the idea upon which it is based to meet the economic conditions it is supposed to meet. But this fact, which must be apparent to those who have given the subject intelligent attention, will doubtless fail to prevent other efforts to enforce it more or less drastically, for the reason set forth by the counsel for the meat packers above quoted. There is too much tendency on the part of those public officials charged with the enforcement of the act to make private capital out of such prosecutions.

The only thing demonstrated by the trial of the packers that is worth recording is that in our present day commercial relationships costs and profit margins do not automatically regulate prices. Theorists have maintained that this regulation is automatic and any interference with it is morally and legally wrong. It is upon this theory the Sherman act is based. The constitutionality of this act has never been successfully attacked, but its fundamental basis is in great danger of crumbling, and that soon.

UNIFORM FOOD LEGISLATION.

At the recent convention of the National Wholesale Grocers' Association the question of legislative control of the manufacture and purveying of foods came in for much discussion. Mr. R. J. Roulston of Chicago, Fifth Vice President of the association, uttered what may be regarded as the consensus of the opinion of the grocery trade on this subject in his speech. He also made a suggestion that state food commissioners may find of interest. Mr. Roulston's ideas, in his own words, are as follows:

As it is a duty of the Government to look after the welfare of its people, the question is not "What does the wrapper say?" but "What does it contain?" "Are its contents pure and are they wholesome?" Beyond this the Danny Dreamers of theory have no right to go, and the state should not add restrictions that increase the cost without benefit to the consumer.

The one thing most desired at this time is uniformity in food legislation. One law applicable and acceptable to every state. Those of us who do an interstate business, know something of the annoyance and expense caused by the operation of the various state laws. The food commissioners of all the states could render no better service than to recommend to their National Association the adoption, without variation, of the Federal pure food bill. It might not be a bad idea to grant them membership ex-officio in our association.

JUSTICE TO CORN SYRUP.

Collier's Weekly, which has occasionally fallen under our criticism for its wrong attitude on certain phases of the food question, and has been long influenced on this question by the views of certain extremists, has at last seen the light on one detail of the important matter of labeling. Reference is made to its editorial on corn syrup in its issue of May 11th, in which the following paragraph occurs:

We believe then that public prejudice against the word glucose is intense and unreasonable, probably because it sounds like glue; that glucose is harmless; that corn syrup is a justifiable designation for the product in dispute, since it has long borne the name, is made from corn starch and does not pretend to be what it is not, there being in the market no other syrup made from corn.

This change of front comes after nearly every state in the Union had adopted this view on the labeling of this universally used food product. Whatever its intention, *Collier's Weekly* is to be congratulated upon having at last done this product justice.

INERTIA.

A Washington dispatch says that pure food and drug advocates have reached the conclusion that much of the plan they recommended will have to go by the board, and that nothing can be expected in this session beyond the enactment of legislation restricting curative claims on labels of medicine. It is believed the House may do something on that topic, owing to public opinion, but those closest to the committee assert that the chief reason for its failure to act is inertia rather than a yielding to the influence of patent medicine manufacturers.

The only hope of getting anything done seems now to be in postponement of adjournment, which would afford time to debate and act. Resistance on the floor to practically anything that can be offered will be strenuous, as is now admitted, and a good deal of time will have to be devoted to it if action is to be had.

CHEMIST HARMS OF UTAH MOVES HIS OFFICE.

Herman Harms, Ph. G., State Chemist of Utah and City Chemist of Salt Lake City, announces that he has moved his office to 312 Boyd Park Building, Salt Lake City.

RESPONSIBILITY OF RETAILERS.

Dr. J. S. Abbott, Food and Drug Commissioner of Texas, has expressed his determination to hold the retailer to a stricter accountability to the food law of the state, and he has solicited the co-operation of retailers in his state in seeing that the law is enforced. Under the law the retailer is as culpable as the manufacturer in the matter of labels, weights and condition of foods sold by him, and it is the intention of Commissioner Abbott to place the responsibility for violations of the law on the retailer where the facts warrant it. In a recent communication to the secretaries of retail merchants' associations in Texas the commissioner says:

"Your hearty co-operation is respectfully desired in our effort to get the retail merchant to use all necessary means to keep foodstuffs, especially butter and eggs, from spoiling during the hot months.

"If the retail merchants do not do this, prosecutions will follow to prevent the sale of decomposed food products."

From a recent bulletin of the Food and Drug Division of the Kentucky Agricultural Experiment Station, which contains regulations covering bleached dried fruits, colored vinegar, lard substitutes, oleomargarine and process butter, fresh and cold storage meats, bread and bakery goods, oysters and eggs, we take the following paragraphs relating to the handling and labeling of bread and bakers' products.

"Practically every retail grocery store handles bread, and although the bread may have been produced in a clean bakery and from pure and wholesome materials, it frequently becomes contaminated in the delivery to the grocery, in the box kept outside of the grocery store for night or early morning deliveries, in the bread boxes of the grocery store, and through handling with unclean hands, and is frequently subjected to further contamination in delivery to the consumer. Bread boxes outside of the grocery store for receiving the bread before and after business hours are sometimes used as a receptacle for meats and other products, all being dumped into it together. The majority of such boxes are seldom if ever cleaned, and are frequently located so as not to be protected from the contamination of the street. The retail grocer will be held responsible for the sanitary condition of such boxes, and for anything in connection therewith which would expose the bread to contamination, and will be held responsible, as well, for the sanitary condition of the bread boxes on the inside of the grocery store and for any careless methods in the handling of the bread, pies, cakes or similar products which would render the same subject to contamination.

"Grocers should see to it that the pies, cakes and other bakery products that they handle are made from pure and genuine materials, and if, for example, a pie is made with an artificial filler, or the jelly roll contains artificial jelly, the law requires this information to be passed on to the consuming public. The retailer can obtain this information from the baker, or secure a guaranty of purity that the goods are not in any manner adulterated, and then sell them accordingly."

The difficulty in enforcing laws and regulations of this character lies in the fact that the retailer does not like to reveal the fact that the goods he sells are artificial when that happens to be the case. He does not know how highly educated his customer may be on imitation products and he does not wish to take the responsibility of educating him to his own possible disadvantage. Such laws and regulations will always be evaded whenever possible.

STATE REGISTRATION OF FLOUR BRANDS.

The *American Miller* feels impelled, from the tenor of recent inquiries from millers in regard to flour brands, to call attention once more to state registration as a means of protecting trade. Most states have statutory provision for registering a brand, label or trade name with the state authorities. This registration does not give one title to a brand unless he owns it, but neither does registration with the patent office; but state registration does give one a prima facie case in the state courts against a user of the same or a similar brand.

The requirements for state registration are easy. There are not the restrictions that federal registration imposes as to the nature of the brand or trade name. Ordinarily one has only to make affidavit that he is using this or that name or device as a brand. The fee is moderate. State registration is so easy that it is rather remarkable that more millers do not avail themselves of it. The Secretary of State usually has charge of the matter. Millers whose trade is confined to their own state or a couple of states should look into this matter.—*American Miller*.

Survey of the Food and Drug World

The Cassava Industry in Jamaica.

Although an effort three years ago by Americans to build up a cassava industry in Jamaica proved unsuccessful, it is announced that another attempt is about to be made to grow cassava on a large scale.

The American promoters have acquired a large tract of land in the parish of Trelawny on which cocoanut trees will be set out at regular intervals on the same ground with the cassava plants. As the work progresses it is proposed to build a factory for manufacturing the cassava tubers into various products, but chiefly starch, for exportation to the United States. Of the exports of cassava starch from Jamaica in 1910, amounting to \$7,947, the United Kingdom took \$6,363 and the United States only \$817; and of \$660 worth of cassava wafers exported, the United States took \$519, or 80 per cent.

Cassava, which is also known as "manioc," a corruption of the name of the genus "Manihot," is cultivated extensively in the West Indies, in South America, and in Africa, where it forms a staple article of diet. In Jamaica cassava ranks third among the "ground provisions" which are the principal articles of food among the natives, yams coming first and potatoes second. Both kinds of cassava are grown in Jamaica, the sweet cassava (*Manihot aipi*) and the bitter cassava (*Manihot utilitissima*), both being prolific bearers of farinaceous tubers usually 8 to 10 inches in length and 1 to 3 inches in diameter. The tubers of the sweet cassava are eaten as a vegetable like yams and potatoes. The bitter cassava contains an acrid, poisonous, milky juice, which has to be removed by pressure after the tubers have been washed, scraped and grated. Bitter cassava is extensively used to make starch for local use and in making "bammies," a sort of cake much used as a substitute for bread in the southern and western parts of the island. There is a cassava factory in the parish of Clarendon which manufactures a variety of products, such as starch, flour, tapioca, breakfast foods, cakes, wafers, cassareep, sauces, etc. Cassava wafers are rightly regarded as a great delicacy, especially by tourists to Jamaica.

Tea Samples to Be Reclassified.

The first work of George F. Mitchell, the new supervising tea examiner, whose services were transferred from the Department of Agriculture to the Treasury Department on June 1st, will be a re-examination of all the tea samples at the various ports, to reclassify them according to the new regulations, that there may be uniformity of ruling. In addition to this the port collectors will be requested to send samples of tea imports for comparison.

The Treasury Department under date of May 27th issued this outline of the duties to be expected of the new examiner:

"1. For the purpose of insuring uniformity of method in the examination of teas under the tea act of March 2, 1897, and acting upon the recommendation of the Board of Tea Experts and representatives of the trade, the Secretary of the Treasury has designated George F. Mitchell, of the Department of Agriculture, as supervising tea examiner for the current year.

"2. When so directed by the Department, the supervising examiner will visit the various ports at which tea examiners are stationed in order to observe and report upon the methods of examination which are in operation, the instruments and apparatus used therefore and the keeping of the records pertaining thereto.

"3. He will also investigate and report upon such matters and perform such duties in connection with the enforcement of the tea act as may hereafter be assigned to him by the Secretary of the Treasury.

"4. Tea examiners shall send to the supervising tea examiner such samples of admissions or rejections, or both, as he may direct."

To each sample a label is to be affixed which shall give the names of the port, importer, port of entry and vessel, entry number, marks, kind of tea and the action taken. If the tea has been rejected the reasons must be stated, and the label signed by the examiner and mailed to George F. Mitchell, supervising examiner, Treasury Department, Washington.

In case of doubt as to whether an importation should be passed or rejected, examiners are instructed to forward a sample to the supervising examiner for advice.

Provisions for Sale of Eggs in New York.

The Mercantile Exchange of New York on behalf of egg receivers calls attention of shippers to the position of the New York city health department in the matter of consigned eggs. The rules of the Chief of the Food Department are as follows:

"Receivers of eggs cannot consider themselves merely as representatives of the shippers not being themselves responsible for the character of the food sold by them. The board of health holds the seller responsible for the condition of the goods sold.

"The Department consider that when a wholesale receiver finds among his receipts a consignment of eggs that is seen to be running largely bad he must eliminate the bad eggs before the lot is sold into consumptive channels.

"When eggs show any unusually heavy loss—say 25 or 30 per cent—it is the duty of receiver of such shipments to notify the health department of the fact, when an inspector will be promptly sent to examine them, and upon ascertaining their condition, direct the method of their disposition.

"Eggs containing 50 per cent of rots and spots, are subject to confiscation in their entirety, their sale being prohibited."

Japan Feels the Cost of Living.

The cost of government in Japan has increased enormously as a result of taxation made necessary to meet war expenditure and an aggressive forward policy in extending the commerce of the country, in providing better educational facilities and in colonial adventuring. The result of extravagant governmental outlay is shown in the heavy advance in the cost of living, involving as it does a consequent reduction of wages. The workers can no longer subsist on the wages they get. Japan is a poor country, and the suffering is greater there than in other countries richer in natural resources and in productive capacity; but the problem of bringing income and outgo into some more nearly equivalent relation seems to be world-wide. It is the uppermost matter engaging the attention of the people of the United States in this year of our Lord. Japan has no monopoly of breakfast-table distress.

Corn Products Refining Company Wins Suit.

The Corn Products Refining Company was the victor in the suit of the D. B. Scully Syrup Company of Chicago against that organization before Federal Judge Carpenter, in Chicago recently. Judge Carpenter found for the defendant, declaring that the action for recovery of \$20,000 was not warranted because the complainant had been guilty of violating a contract with the Corn Products Refining Company.

"The Scully company had a contract whereby it was to purchase all the glucose it required from the Corn Products Refining Company," said the court. "The evidence bears out the fact that the complaining company did not purchase all its material from the defendant, as its agreement maintained must be done to receive the rebate.

"This suit is for the recovery of the rebate claimed due. The complainant is not entitled to it. The court finds for the defendant."

Bakers Will Seek to Revise Indiana Law.

The Indiana Association of Master Bakers, at the final meeting of its eighth annual convention at the Denison Hotel May 8th, prepared to make a fight for the revision of the sanitary food law of 1909 in the next session of the Indiana Legislature.

A legislative committee was appointed to present the question before the General Assembly in the form of an amendment to Section 2 of the law. The section, enforced by a special order of the State Board of Health, provides that all bakers' goods be kept under glass, metal or wooden coverings. The bakers seek to amend the section for the reason, they say, that freshly baked goods, when placed immediately under coverings, likely will spoil.

Flavoring Extracts to Cost More.

President W. M. McCormick, in his address before the convention of the Flavoring Extract Manufacturers' Association of the United States, in session at Baltimore June 4th, 5th and 6th, said that the day of the five and ten-cent bottles of extracts probably soon will be gone. To make profits he said the companies will have to fix the smallest price at 25

cents. He pointed out defects in the tariff law and in proposed measures, saying that some of these will permit impure products to come into the country in competition with pure American products.

Water in Vinegar Held No Adulteration.

The use of water in making vinegar is not a violation of the Massachusetts vinegar statutes, according to a finding of Judge Chase in the Superior Criminal Court of Boston. In the case of Albert A. Smith, of Dorchester, charged with selling as cider vinegar vinegar not such, he ordered the jury to return a verdict of not guilty. It has heretofore been held that cider vinegar must be the exclusive product of alcoholic and subsequent acetous fermentation of the pure juice of fresh apples, but Judge Chase held that the use of water in vinegar was not a violation of the vinegar law, vinegar being a manufactured product of which water and acetic acid were the two principal component elements.

Cereal Crops in Southern Europe.

A cablegram, dated May 18, 1912, from the International Institute of Agriculture, Rome, Italy, has been received by the United States Department of Agriculture, giving the following information:

"For Italy the reported area planted to winter wheat this season is 11,737,000 acres; winter rye 301,000 acres; winter barley 605,000 acres; winter oats 1,235,000 acres. For Hungary (including Croatia and Slavonia), spring wheat 226,000 acres; spring barley 2,442,000 acres; spring oats 2,782,000 acres."

Control of Street Candy Venders in Chicago.

Dr. B. E. Sherman, Chief Food Inspector of the Chicago Department of Health, has inaugurated a move to insure clean candy sales by street venders.

Many of these venders, he asserts, ignore the rules of the Health Department and the city ordinances requiring candies and such articles to be covered while on the street. As a result their goods are filled with dirt and refuse, and become unwholesome.

He has ordered the inspectors to keep close watch of candy stands during the hot weather.

Another "Combination in Restraint of Trade."

Nothing daunted by the failures in the past to put the growing of raisins on a profitable basis the growers are, according to Fresno mail advices, to make another try in that direction. What is designated in the reports as a big corporation is being formed, its purpose being to buy and hold raisins at a uniform price. Many who would be likely to take stock in the corporation have been conferred with and all thus far have expressed their willingness to take \$10,000 or more of stock in the concern. The California Raisin Exchange held its annual meeting on Saturday, May 25th.

Dry Goods Men Oppose Richardson Bill.

The National Retail Dry Goods Association has taken a stand against the passing of the Richardson bill, which aims to put cosmetics, toilet articles, and similar merchandise under the jurisdiction of the Federal food and drugs act. It is said that if the bill passes in its present form it would increase the cost of these articles to a degree that would make their sale in department stores practically impossible, as it requires that departments handling these goods be placed in charge of a physician or registered pharmacist.

Texas Declares for "Loss Off" Basis in Egg Sale.

Under date of April 18, Commissioner Abbott has circularized egg dealers in Texas as follows:

"Section 2 of the Texas Food and Drug Law prohibits the sale of any filthy, decomposed, or putrid animal or vegetable substance. You are respectfully notified that it will be illegal for you to sell, expose for sale, offer for sale, or buy for sale any filthy, decomposed, or putrid eggs, except on a basis of what is known as 'loss off.'"

DOLLAR-A-WEEK EXISTENCE.

A Philadelphia dietitian claims to have demonstrated with two men in a trial of six weeks that the human body can be adequately nourished at an expense of only \$1 a week. It is believable, if one wants to look on himself merely as a machine, but who wants to live that way? It was found that the body requires 2,800 heat units a day. There we have it. Put ourselves on the unit system. Find out exactly how many units of heat or strength are required for our work and

then shut off on the supply as soon as the necessary amount is reached. Better still, stoke ourselves in a way that will maintain an even temperature of heat in the body and at the same time distribute strength equitably throughout the day. It makes for efficiency. But again, who wants to live that way, even if it might be the only means of completely humbugging the food trust? There is a pleasure in eating that should never be despised. That it is entirely proper is indicated by the tempting character of food. When food does not tempt one there is something wrong with the health. Let them talk as they will, there is not a great deal wrong with the health of one whose appetite is all right. Of course, this does not mean that gluttony is desirable, but simply that the pleasure of eating should be preserved. Who wants to pay any attention to units when he sits down at the table? Eat until satisfied; that's nature's way of regulating how many units of food are required. It is something that is run on pretty much the same basis as breathing, and until further notice it is quite likely that the majority of people will continue to eat until they are satisfied, regardless either of units or dollars.—*Labor World*.

ICE MACHINE IN AN ANCIENT LAND.

"The morning after my kelek, or raft, tied up above the bridge of boats which links Mosul with the ruins of Nineveh and Nebi Yunis ('Prophet Jonah,' the name of a tomb, a mosque and a village amid the ruins) I was visited by an American from Providence, R. I., who saw the American flag flying above my tent," says a traveler. "Since the new regime he has returned to this, his old home, bringing various improvements for this untouched section of the Orient.

"The most marvelous, in the eyes of the natives, is an ice-making machine, which is surely needed since a summer temperature of 110 degrees is common in Mosul. The ignorant and fanatical Moslems look askance at this interference with the ways of Allah. According to their reasoning, if Allah had wanted it to be cool he would have made it so. 'In'sh Allah'—'It is God's will'—is the phrase that paralyzes progress and destroys an American's temper, as the natives thus lay all their laziness, lying and general cussedness on the Lord.

"'In'sh Allah,' stood seriously in the way of this ice machine, but even it had to stand aside when an American saw clear profits of a \$20 a ton in plain sight. Next an American soda water fountain will follow the ice machine, for Ottomans are very fond of drinks, and the Prophet forbids alcohol—although the use of intoxicants is on the increase among Moslems. In summer the wealthier classes in Mosul pay three cents a pound for snow, brought from the mountains, packed in straw."

CHANGES IN THE GROCERY BUSINESS.

Fifty years ago it was the fashion in New York for housekeepers to go to the store for supplies; today they leave it to steward or servant, use the telephone, or possibly the mail to give orders for groceries. And worse yet, they demand that Mr. Grocer send a gentlemanly clerk, in a modern stylish wagon to receive and deliver orders. And so it comes about in city and town life that middlemen are in every household as well as the marts of trade, and this adds to expenses and reduces net profit.

The profit of the retail grocer is small, varying from 2 to 8 per cent, and it is also a fact that there is no limit to the possibility of increase of business. He is forced to add new departments, to extend the field of operations.

As late as 1870 the stock of the grocer was chiefly staples, sugar, molasses, tea, coffee, soap, starch, candles, salt fish and to some extent provisions. "Shelf goods" were practically unknown and there was no trade in proprietary package goods. Today over 3,000 separate articles, and in some stores many more are kept in stock and must be, to satisfy demands created by publicity. There were no cereal foods in cartons sold in 1868-70, and very few were in demand in bulk, but they afforded a large profit. There isn't a retailer that doesn't sell times over the quantity of cereal foods in packages than the total bulk of his sales before their advent. The profit is smaller, but the increased sales make a greater net profit.

Changes have forced and will continue to force heavier service at higher cost, but they will bring a larger volume of business conducted in different channels than formerly. There were no chain stores in 1860; no gigantic department stores; no palatial grocery stores with costly equipment. They each have a patronage entirely distinct in character and demand, and yet all have to face the problem of small, very small net profit on a huge volume of business.—*West Coast Trade*.

Keynote Speech at Wholesale Grocers' Convention.

The keynote speech of the convention of the National Wholesale Grocers' Association, held in St. Louis May 15th, 16th and 17th, was made by Mr. Dana T. Ackerly, of Breed, Abbott & Morgan, counsel for the association, the first day of the convention. It sets forth the aims and objects of the organization and its progress along the lines of its most important activities, in vivid language.

Mr. Ackerly spoke as follows:

"The National Wholesale Grocers' Association has, during the few crowded years since its organization, been remarkably successful in disseminating truth, the fundamental, economic truths that underlie fair dealing and upright trade everywhere. It is most appropriate, then, that in the year when your annual campfire first illumines the banks of the Mississippi, you should pitch your tents in the State of Missouri, where romance, guesswork and other vain products of imagination are outlawed, where every child in arms instinctively demands the facts.

"Paper organizations, associations of gossamer, made chiefly of high sounding objects with some honorary and not a few ornery members, are so common that a real organization must always be an object of much interest. There is, then, only one thing more important than for you to see St. Louis, and that is for Missouri to see you.

"There is nothing in which Missouri is more expert than the investigation of wrongs against the people, unless it be prosecution. From this commonwealth all trusts are banished, and not infrequently the vigilant authorities have taken the precaution to behead or dismember before banishment. Counsel have been wont to advise you that an organization like yours, national in scope, should, in justice as well to itself as to others, be scrupulous in its obedience not only of the national laws, but of every law of all the forty-eight states. Fortunately you have succeeded splendidly. You have never given more convincing assurance of the legality and justice of your associate activities than by voluntarily entering the confines of Missouri. You have proved that your record and your conscience are clear.

"During the past year the work of counsel has carried us as far north as Duluth, and south to Tallahassee, as well as to many and divers intermediate points. At Duluth, where the Association of State and National Food and Dairy Departments had its annual meeting, we favored, on behalf of your association, the enactment in all states of effective food laws modeled after the national pure food law, and we particularly asked the uniform enforcement of such laws. We are glad to be able to report that the food control officers, state and national, there assembled, again declared themselves for the principle of uniformity.

"At Tallahassee, in company with Mr. Beckmann, we joined in a conference with half a hundred or more manufacturers and wholesalers in urging the Attorney General, the Commissioner of Agriculture and the State Chemist of Florida to grant a reasonable extension for compliance with the new weight or measure branding statute of that state. The Florida authorities finally adopted the principle of the Federal officers, in enforcing the national food law in all cases where no injury to health was involved, and granted a year for the trade to dispose of stocks on hand.

"Other missions of counsel during the year, undertaken at the direction of different committees and of your esteemed president, have been numerous and important, but none has been more worthy of mention here than our attendance at the conference in Washington for the organization of a national commercial organization. It was held by special invitation of the President of the United States and under the auspices of Secretary Nagel's department. It was a distinct success and resulted in the organization of a national Chamber of Commerce on the best foundations.

"Although your association is still comparatively young, it has already been the privilege of your officers to confer and advise with Congress and with at least four Federal departments—Commerce and Labor, the Treasury, Agriculture and Justice. Happily, all visits, including that last mentioned, have been voluntary and have turned out happily. But, strangely enough, no call has come from Secretary Fisher, notwithstanding the fact that you are generally conceded to be the

best qualified experts upon all matters pertaining to the 'Department of the Interior.'

"At Chicago, in May, 1911, we attended by invitation a meeting of the executive committee of the National Canners' Association to consider the recommendation to the members of both associations of uniform minimum net weights for branding upon canned goods.

"There has been considerable correspondence and consultation this year as to the parcels post, one-cent letter postage, interinsurance, railroad freight rates, uniform tares, the manufacturer's name issue, proposed amendments to the national bankrupt act, certain tentative rulings of the United States Board of Food and Drug Inspection, bills of lading, contracts and tea importations.

"The question of securing members from Texas has again been submitted to us. We advised emphatically that the association is not engaged in any activities whatever that can possibly be regarded as an infringement of any statutes of Texas. We urged that the warmest invitation be extended to the wholesale grocers of that state. We understand that many of them are at the convention.

"As counsel for the association we attended a meeting of the National Civic Federation, devoted chiefly to the consideration of ways and means for obtaining uniform legislation. The Federation now has a division, of which Mr. Breed is a member, devoted specially to the subject of foods and to the work of obtaining laws upon that subject uniform with the present national statute.

"We attended a conference of the trade and of the Kentucky food control officers called at Lexington for the purpose of considering uniform state legislation; also a conference of the uniform bill of lading committee of the American Bankers' Association, the annual meeting of the National Canners' Association at Rochester and various executive and legislative hearings in different states upon subjects affecting the interests of members, and committed to your counsel for action.

"The most important work of counsel has been the preparation of opinions for members, consultation with your officers, with the executive and other committees. When we first received the honor of this appointment the association had but 123 members. To-day you have more than six times that number. It must be evident, then, that the volume and importance of the consultation work for members has never been greater than at present.

"The various features of the legislative work for the year just past will be reported to you by the pure food committee. You will see that this work is growing to be a continuous performance. We have recently added to the Union Arizona and New Mexico, making a total of forty-eight states, and the legislative mills of these two new commonwealths are even now grinding away at a rapid pace. Furthermore, the President of the United States and the governors of many states seem to have become confirmed in the habit of calling extra legislative sessions. You must appreciate, then, that the important work of the pure food committee is now perennial, since there is hardly a month when either Congress or the legislatures of two or more states are not in session.

"The one concern of the association this year, as previously, has been to urge by every proper means at its command that legislation upon all commercial subjects, and particularly that as to food products, shall be uniform and, so far as possible, modeled after our Federal laws. We ask our lawmakers to recognize that modern invention has wiped out state lines in matters of commerce.

"We trust no one has obtained the impression that the association is always opposing legislation. The pure food committee has most actively favored the enactment of food laws uniform with the national and the passage of other statutes designed to put the entire food trade upon an even footing.

"As you all know, during the past year the association has made a determined effort to secure the enactment by Congress of the Stevens-Burton compulsory weight or measure branding bill. Counsel have appeared before the Senate Committee on Manufactures and the House Committee on Interstate and Foreign Commerce to urge the prompt adoption of these bills in their present form. We may be permitted to observe that

there seems to be only one thing more difficult than to defeat an unreasonable bill, and that is to pass a good one.

"The counselship of your association, involving the necessity of frequent research for the purpose of answering the hundreds of questions that naturally occur to so many different minds as are represented in your committees, may be said to have amounted to a liberal education. We have recently had occasion to examine the Scriptures upon some points pertaining to your vocation. Now, you will be mistaken if you hastily jump to the conclusion that we were not familiar with the Scriptures before we were retained by you, but we must confess that until recently we had not been fully aware of the venerable origin of your business, therein chronicled, as we shall immediately explain.

"By some superficial minds you have been called middlemen. We have never been quite able to see how you are middlemen, unless it be that you keep squarely and openly in the middle of the road and run the gauntlet of criticism from all sides. You gather, garner and distribute life's very first necessity. The idea that you are some sort of an excrescence upon the body politic is the most transparent of economic fallacies. He who gathers our food from all parts of the world and offers it ready at hand day by day is hardly a superfluous factor.

"Nor must it be supposed that his sole service is to the consumer. The grower, producer or manufacturer would not always be paid for his labor and his own subsistence if there were no one at hand to buy, if he must himself provide the complicated commercial machinery for distribution direct from field to table. The wholesale grocer is the banker for both producer and consumer.

"Your profession dates from the time of Pharaoh. You are mentioned in Genesis, the book that recounts the creation of the world itself. Later historians inform us that the manufacturer and retailer came hundreds of years afterward. Your prototype, your ancient competitor, was no less a person than Joseph. We read: 'And he gathered up all the food.' 'He laid up the food in the cities; the food of the field, which was round about every city, laid he up in the same.' And later it is said: 'And all countries came into Egypt to Joseph for to buy corn.' He had the first corner. But he did not boost prices. Indeed, like the wholesale grocer, Joseph was a philanthropist.

"In conclusion, counsel desire most sincerely to congratulate your association upon its wise and fortunate selection of officers for the guidance of its policies and the performance of the great amount of effective work that you are able to accomplish from year to year through the faithfulness and industry of your president, secretary, treasurer, vice presidents and committees. Counsel account it a privilege to be associated with these gentlemen.

If counsel, by reason of their intimacy with a considerable part of your activities, are at all able to judge, the work of the association has never been more arduous nor more successfully completed than during the year now ending. Gibbon has said that 'the winds and waves are always on the side of the ablest navigators.' The present condition of the National Wholesale Grocers' Association is the best evidence that in your officials the association has had the very best pilots."

SOME FOREIGN FOOD STANDARDS AND FOOD LAW PROCEDURE.

Tariff regulations of foreign countries frequently prescribe food standards as part of the conditions under which imports of foods are made. By a regulation issued by the Governor General of the Commonwealth of Australia on February 28, 1912, a new paragraph is added to the provisional regulations under the commerce act of 1905 providing as follows for the trade description of imported condensed skimmed milk:

"In the case of condensed skimmed milk or condensed separated milk, the trade description shall include the words 'condensed skimmed milk, unfit for infants,' or 'condensed separated milk, unfit for infants,' printed in bold-faced sans serif type [i. e., gothic] of not less size than 12 points face measurement; the said words shall form the first words of the label; no other words shall be written on the same line or lines. Additionally, there shall be printed across the face of the whole of the label, in a diagonal line and in a transparent red color, the words 'skimmed milk' in bold faced sans serif capital type of not less size than 48 points face measurement."

Under the old regulations a mere description of the character of the imported milk was considered a sufficient trade description.

Under the adulteration act the Canadian Government has established the standards for edible vegetable oil as follows:

"(1) Olive oil, sweet oil, is entirely a product of the olive tree; its specific gravity at 15.5 degrees C. is not less than 0.914 nor more than 0.9196; its specific refractive index at 15.5 degrees C. is not less than 1.47 nor more than 1.4718; its Maumene number lies between 42 and 52; its iodine absorption number (using the Hubl solution) lies between 77 per cent and 94 per cent; its saponification number (Koettstorfer number) lies between 185 and 195; it does not contain above 3.5 per cent of free fatty acids.

"(2) Cottonseed oil is the oil obtained from the seeds of cotton plants and subjected to refining processes; it is free from rancidity; its specific gravity at 15.5 degrees C. is between 0.9216 and 0.93; its refractive index (at 25 degrees C.) is not less than 1.47 and not more than 1.4725; and its iodine number is not less than 104 and not more than 110 (Hubl solution)."

Either of the above may be sold as salad oil, but when cottonseed oil is offered as salad oil, the fact that the article is cottonseed oil must be declared on the label. Mixtures of cottonseed oil with olive oil must be so declared on the label.

Consul Felix S. S. Johnson of Kingston, Ontario, describes certain provisions concerning the adulteration of foods which were added to the Canadian inland-revenue act in 1868 as an amendment and passed. As this was the foundation of all later acts a summary of the provisions may be interesting:

Analysts were appointed in Halifax, Montreal, London (Ontario), St. John, Toronto and Quebec. The inland-revenue officers were to collect samples of goods suspected to be adulterated and submit them to the analysts. On receiving a certificate that these suspicions were well founded they were to seize and destroy the goods. The analysts were to report quarterly to the Minister of Inland Revenue at Ottawa, who was to present the results to Parliament annually. Dealers were obliged to give samples whenever requested, and the penalty for selling adulterated food was \$100 on the first conviction and \$200 for a subsequent offense. A manufacturer was to be fined \$100 for a first offense and upon a second conviction was liable to six months' imprisonment.

The adulteration act of 1884 is in force today. It was amended in 1888, 1890, 1896, and 1900, but the changes were comparatively unimportant, being principally definitions. The new act provided for the appointment of a chief analyst, who was to be attached to the staff of the Inland-Revenue Department at Ottawa. He was to be a final arbitrator whenever a question arose as to the correctness of any analyses made by a local analyst. He was to supervise generally the work of the laboratory of inland revenue and prepare from time to time bulletins setting forth the results of the collection of samples. These were to be issued to the public and contain the names of the venders from whom the inspectors obtained samples, as well as names of manufacturers when possible. The exact condition of each article examined was to be shown, together with the opinion of the analyst regarding the purity and fitness for the purpose for which it was sold. In all, 231 of these bulletins have been issued in 27 years.

When adulteration is found, the procedure is similar to the English practice. The Minister of Inland Revenue, acting on information, may order a collection of the articles suspected to be adulterated, and these samples are bought and paid for in the usual way by inland-revenue inspectors. If they are found to be adulterated under the meaning of the act, the seller is obliged to pay a sum ranging from \$8 to \$14 to cover the cost of the analyses. This is not a fine, and has to be paid in any event. The fact being thus established, the Government may bring an action in the ordinary courts of the district in which the adulterated goods were sold. If the action is successful, the fine is \$5 to \$200 for a first offense, and a fine or imprisonment, or both, for a subsequent conviction.

In 1898 an amendment provided the retail dealer with an additional safeguard in the form of warranty of purity. If the vender can produce this, the action is shifted to the giver of the warranty, but the warranty does not relieve the retailer from paying the costs of analyses.

A clause provides for fixing standards of purity. These may be established by the Governor General in council at any time and have the force of law at the expiration of 30 days. The chief analyst prepared a complete set of provisional standards and submitted them to the manufacturers and importers for criticism and approval. Some of these have since become law by an order of the Governor General in council: they cover milk and milk products (1910), grain products (1911), meats (1910), and beverages (1911). Others covering baking powder, flavoring extracts, jams and cream of tartar are in course of preparation.

What the Other Fellow Thinks

Hurrah for a Uniform Pea Crop!

At the suggestion of divers canners the University of Wisconsin will begin a series of experiments for the purpose of developing a pea vine that will give an increased yield of more uniform size. So says a dispatch from Madison.

The movement to secure greater uniformity in the pea crop of the country is strictly in line with prevailing tendencies. On all sides the demand is for more uniformity. There seems to be a general impression that there is entirely too much diversity in this country.

The demand for a uniform divorce law is heard in the land from time to time, and on each occasion with redoubled vigor. The movement for uniform tax laws is making progress slowly. There is also the demand for uniform estates.

Such being the case, it is not surprising to meet with a demand for more uniform peas at this particular time. The advantages of such an arrangement are obvious. It is hardly too much to say that the standardization of the peas throughout the United States would mark an epoch in the progress of the nation toward complete uniformity.

With uniform peas firmly established as a national institution, the horrors of travel from one state or section to another would be greatly alleviated. The traveler would know that he would not be confronted in some distant place with strange peas of a size to which he was not accustomed. He could rest content in the assurance that the peas would be the sort he always had at home.

Moreover, a standard pea would greatly simplify many guessing contests. With peas all sorts of sizes, as they are at present, the task of guessing the number held in a glass jar, and gaining an automobile or a house and lot by doing it, is unusually difficult. With standard peas, however, one could soon acquire sufficient expertness at the game to make perhaps a great deal of money.

It is true there would be some few inconveniences. Men, for instance, would have to forego the pleasure of telling their neighbors that they had the finest, largest peas in the neighborhood. But when we consider the benefits that would spring from a uniform style in peas, such objections appear too trifling to deserve mention.

After the University of Wisconsin has worked out the problem and conferred the blessings of a uniform pea on this country, we trust that it will continue to direct its attention to the subject of uniform vegetables and fruits. What this country imperatively demands is vegetables and fruits that will be just as large at the bottom of the basket as at the top.—*Chicago Inter Ocean*.

After the Hanging, the Trial.

If any Philadelphia meat packers have been guilty of the practices ascribed to them by a former inspector who has been testifying before a Congressional committee at Washington, they richly deserve the exposure brought about by the publicity given to his story. It appears, however, that owing to the methods that obtain in Congressional investigations, the packers have been punished first and the question of their guilt or innocence left for subsequent determination. Whether true or untrue, the broadcasting of the charges is bound to do their business an immense amount of harm. Suppose the story of lax inspection, the marketing of diseased meat and the conduct of the slaughtering business in unsanitary surroundings should prove to be false; suppose later testimony should utterly discredit the tale of the accusing witness? What redress would be open to the defamed packers? What chance would the truth have of catching up with an agile lie that had been given two or three days' start?

We hold no brief for the Philadelphia packing houses, but it would seem that even if no presumption had been created in their favor by their established reputation for the cleanliness of their operations and the quality of the products, they are entitled to fair play. The most conscientious and careful business man in any line of trade might be well-nigh ruined in fortune and reputation by ex parte testimony from an inimical witness, sent forth from Washington to hundreds of newspapers, decrying his products and attacking his methods as injurious to the public welfare.

Justice demands that in an inquiry of this kind, when a single witness gives testimony that must prove highly in-

jurious to a reputable industry, some discretion should be used by Congressmen in making public the testimony until both sides of the case are heard and the credibility of the witness established. It is unfair and un-American to give the packers a black eye to begin with and then proceed to determine what justification exists for the assault. If meat that is unwholesome is being packed or sold here, we want to know the names of the perpetrators of the outrage; but no firm should be held up to obloquy without reasonable assurance of its guilt in the shape of a preponderance of unprejudiced evidence against it after a fair hearing of the defense.—*Philadelphia Record*.

A Fool Attitude Smashed in New York State.

The Supreme Court of New York State, in a decision handed down last week, eternally smashed a fool argument which the New York Department of Weights and Measures had taken into court, and which as frequently been discussed in these columns.

New York City has an ordinance requiring the sale of certain products by weight. The city Weights and Measures Department held that this absolutely prohibited merchants from selling goods "by the package," and that everything sold must be sold by the pound or the peck, as the case might be. So believing, they sent an inspector to the store of Henry T. Hendricks, a local New York grocer, to buy "a pound jar of bacon." Mr. Hendricks' clerk informed him that the store carried no pound jars, and that bacon in glass was sold by the jar, not by the pound. Whereupon the inspector, having been ordered so to do by his intelligent superiors, arrested Mr. Hendricks and sought to make him pay a fine for violating the ordinance!

The case was appealed, and the Supreme Court said that Mr. Hendricks had not violated the ordinance at all. In substance the opinion holds that goods can be sold by the package in spite of the law, provided the buyer knows he is buying them that way, and provided also that the sale is made without any false representation as to weight or measure.

Any other view would be to the last degree absurd and oppressive. To say that a man cannot sell, and another one cannot buy eight ounces of merchandise in a package, both acting in full knowledge of all the conditions surrounding the sale, is to deny to both their right of contract, and this would probably defeat any law or ordinance requiring the sale of merchandise by weight on the ground that it applied only to cases of misrepresentation.—*Grocery World and General Merchant*.

Doesn't Like the Word "Adulterated."

We dislike the word "adulterated" when applied to butter containing 16 per cent or more moisture. We believe it to be misleading and that it does not convey the right idea to the general public and has a tendency to prejudice the public against butter when there is no real reason for the existence of any prejudice.

Butter is not adulterated by the presence of water. Water is a constituent of butter and it cannot be produced without water; wherefore, then, is the justice or right of calling butter adulterated if it happens to have an excessive amount of one of its constituents?

The common acception of the word "adulterated" is to mix something of a deleterious or inferior nature with a pure product. We speak of certain animal feeds being adulterated when certain articles such as oat hulls, peanut shells or even shavings are mixed with them. These articles have no commercial value as a food product because they contain nothing of a nutritious nature. They are simply placed in the feed to deceive the purchaser. They are not a constituent of the feed in any way, and are not in it as a necessity, as water is in butter.

To the general public, who know nothing of butter or its process of manufacture, when they hear of adulterated butter they are apt to imagine it to contain all manner of foul and impure matter instead of only a slight excess of pure and wholesome water.—*Chicago Dairy Produce*.

The Whims of the People.

That much of the high cost of living is due to the whims and desires of customers was the statement made to the writer by a large manufacturer last week.

In a retail store recently he witnessed a purchase of a small article which the buyer asked to have delivered as soon as possible. She lived a couple of miles away. The dealer, of course, had to give this delivery service which was costing him more than the profit on the article.

"There's one reason for the high cost of living," he remarked, when the customer had departed. "Do you think I could live if I didn't get that delivery money back again?" he asked.

The consuming public is undoubtedly getting more and more particular. There are women in large cities known to have asked a merchant to send to their homes a paper of pins or some other equally insignificant article.

All this must necessarily add to living expenses because merchants cannot be expected to maintain expensive delivery systems for nothing. If such very particular service is demanded—and it is in many cases from all classes of merchants—the buyer must pay for it.

There is a great deal of truth in the statement that the desires and whims of the people have so much to do with the cost of living.—*Canadian Grocer*.

The Future of the Food Supply.

The growth of cities at the expense of the development of the country districts is the great problem of the age. It has grown into the first importance by the increasing decline in our own and the world's food supply, caused by the steady abandonment by the population of the agricultural regions and their swarming to the towns and cities.

This is the plain fact, seen not only in our own country, but in all the others where the people enjoy a high degree of civilization, and its effect in causing a corresponding decrease in the food supply and a consequent increase in the cost of living is so plain that all save a few philosophers, who interest themselves wholly in abstruse theories of public economy, can and do readily recognize and understand the situation.

Unless there shall be some change in the situation, the time will come when our chief food supply will be concocted by chemists in great laboratories in cities of the elementary substances that are to be found in the atmosphere and in earthy matter. Flesh meat and bread made of grain will then be unknown. Doubtless the chemists will be able to feed the population when the necessity shall be created by the refusal of man to till the soil and sow and reap.—*New Orleans Daily Picayune*.

Germs and Their Press Agents

Three billion germs in a handshake is the latest scare line of science. Fifty University of Wisconsin students will shake hands with somebody whose right palm has been well germed. Then they will take microscopic views of their hands, make them into moving picture slides, and use them as awful warnings against promiscuous glad hand gatherings.

Science grows more and more sensational. We hear daily of new and horrible holdup bugs attacking our poor bodies with billions of blackjacks. It seems a wonder that anybody is still alive. But these yellow scientists forget to point out the other side. There are good germs as well as bad. The healthy body is constantly turning out billions of sturdy fighting soldiers. These pitch into the bad germ and polish him off in no time.

Not only that, but the more the fighting the greater the vigor and endurance of these fighters. Too much ease and coddling take the heart out of them. Presently we shall be so shut away from bad germs that the first one that catches us without armor will put us out in the first tilt.

We hear much of the gruesome doings of bad germs. Let the scientists tell us something of the brave deeds on the other side of the battle.—*New York Evening World*.

Formula for a Good Newspaper Story.

Formula for making a good newspaper story, which may also be used by any politician in need of publicity: Take the word "trust," and prefix it with the name of any commodity in common use, or any industry, particularly one which has been successful. This combination makes an excellent leaven for application to the imagination of the writer or politician using it, and usually guarantees prolific results in the way of sensation. Occasionally the batch fails to rise, in which case throw it away and make a fresh lot of dough, merely applying a different prefix to the word "trust." Facts are never needed in using this formula; indeed, they are liable to sour the dough if used. Skillful manipulators sometimes use a fact or two for coloring matter, however, and this results in making a very attractive product, provided not too many facts are employed. There is no particular season for the use of this formula. Publications seeking to boost their circulation employ it at all times, but in the case of politicians the season of legislative sessions is found to yield the best results.—*National Provisioner*.

FLAVORING MANUFACTURERS' CONVENTION.

With the selection of Cincinnati as the next convention city and with the election of Mr. S. H. Sherer, of Chicago, as the president, the annual convention of the Flavoring Manufacturers' Association closed in Baltimore Thursday evening, June 6, with a banquet at the Country Club at Roland Park.

During the business sessions, which were held at the Hotel Emerson, the 150 delegates gave strict attention to business but they took one afternoon off and went down the Chesapeake Bay to Annapolis, where they inspected the United States Naval Academy.

Perhaps one of the most important pieces of business of the convention was the authorizing of the president to appoint a committee to devise some method by which there can be a reduction of the loss by breakage and leakage in package goods. This is a question that will be taken up with the several transportation companies.

More important than anything else, however, was the visit of Dr. W. W. Stockberger, of the Plant Section of the United States Department of Agriculture, who announced that he had succeeded in growing vanilla beans on the Government reservation at Miami, Florida, and he showed some of the samples of the cured beans. While the beans were not cured just as the trade wants them, suggestions were made to Dr. Stockberger who said that he would carry them out. He said that if the manufacturers would back him in his work, he would go into the raising and curing business on a large scale. This promise was readily given, delegates assuring him that they would be only too glad to take all the beans he could supply. If the beans can be successfully raised in Florida, it means that the manufacturers of this country will be independent of France and Mexico, especially the latter country, in which there is always much trouble.

For the first time, the manufacturers and the Board of Food and Drug Inspection got together for their mutual benefit. Drs. R. E. Doolittle, A. S. Mitchell and F. L. Dunlap of the board made addresses and incidentally were acquainted with some of the troubles of the manufacturers in the replies that were made.

The delegates discussed at length the various pure food laws of the different states and they declared their intention to get together and to use every effort to have the states adopt a uniform pure food law based upon the national law.

Other officers, besides the president, were elected as follows: First vice-president, John L. Clawson, Philadelphia; second vice-president, Dr. S. H. Baer, St. Louis; third vice-president, C. C. Jennings, Grand Rapids, Mich., and secretary, Norman Peck, Indianapolis.

UTAH SODA BOTTLE RULE EXTENDED.

By agreement between the Manufacturers' Association of Utah and representatives of the State Pure Food Commission, the matter of enforcing the "pop" bottle order of the commission will be held in abeyance for the present.

It was arranged that a committee of manufacturers appear before the State Food Commission at a meeting to be held later. At that conference the question will be gone into thoroughly and some conclusion will probably be reached for report back to the Manufacturers' Association.

The controversy has arisen out of the fact that the order of the food commission requiring soda water manufacturers to discard the use of the "pop" bottles with push-down stoppers will work a hardship upon soda water manufacturers and bottlers, according to the complaint of the latter.

It is asserted by them that insufficient time was permitted in which to make the change, as some of them had ordered large stocks of the proscribed bottles, which were delivered to them just prior to the issue of the discarding order by the commission. The soda water people made complaint that they could not get a fair hearing in the matter and appealed to the Manufacturers' Association to intercede in their behalf.

LARGE REVENUE FROM POTATO DUTIES.

The potato shortage has contributed quite a sum to the Federal Treasury. The Boston custom house has taken in more than \$411,000 duties on imported tubers since the new year, and even Portland has turned in more than \$24,000 in that time. New York, of course, has collected very much larger sums. The 25c rate has been a good revenue producer, whatever may have been its effects as a protection to American farmers. If the duty were off it is clear that the treasury wouldn't get the money, but it is doubtful whether the consumer would get his potatoes, foreign or domestic, any cheaper.—*Lowell Courier Citizen*.

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"This (———) is sweetened with Saccharin for the benefit of those to whom Sugar is harmful or deleterious."

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"This (———) is sweetened with Saccharin for the benefit of those to whom an excess of Sugar may be harmful or deleterious."

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At Bagley Hall, Washington University, Seattle, Wash., July 9th to July 12th, 1912.

(Compiled from the Report of the Official Stenographer of the Convention.)

TUESDAY, JULY 9, 1912.

Morning Session, 10 O'Clock.

The President: Gentlemen, the sixteenth annual meeting of the American Association of Food, Dairy and Drug Officials will now come to order. The chair desires to state that one of the subjects for consideration this morning is the question of a new constitution. Many members seem not to be thoroughly informed upon that document, and I wish to say that there are a number of copies of it here that may be had by any who desire to have them.

We will proceed with the regular program. The first thing on the program is the address of welcome on behalf of the City of Seattle, and will be delivered by His Honor, Mayor George F. Cotterill. (Applause.)

ADDRESS OF WELCOME.

By Hon. George F. Cotterill, Mayor of Seattle.

Mr. President and Gentlemen of this Convention:

I am very sorry that this program might not have started out as printed, for I am sure that it would have been a very great pleasure and honor for the Governor of the State of Washington to have been here today and given you welcome, as I know he would have been glad to have done.

Speaking for our city, it is unnecessary for me to say, because it is in the air, and you know it, that you are welcome to Seattle. While this is not the largest among the many conventions that have come to Seattle this year, and others that are yet to come, I imagine that among these men whom I am looking at, at this time, few though you be in number, you have the capacity and opportunity to raise just as much trouble for the public good as any set of men in this country. We feel here in Seattle and in the State of Washington that it is a good place to welcome you to. You seem to know that it is a good thing to hold your annual conventions out on the Pacific Coast, even in the Pacific Northwest. You know a good climate, a good summer climate, when you see it or experience it. This organization has held but sixteen

annual conventions, I believe, and I understand that three of them have been on the Pacific Coast. That is a much larger proportion than has come from other organizations; but this, I understand, is your first meeting in the State of Washington, and, certainly, your first in the city of Seattle.

We feel that in Seattle, and this would apply to our whole Puget Sound vicinity, certainly, that we have at least a first class foundation for the good work in which you are engaged. We have, to start with, about as pure air, and certainly as pure water as any city, as any vicinity, we believe, could be blessed with, and if, in addition to that, we can be favored with the degree of inspection and protection which will assure to us pure foods and a freedom from deleterious drugs that altogether humanity will have been placed, in our section at least, on about as perfect a health basis as is imaginable.

I believe that if you have the occasion, as I am sure you will be glad to before you leave this city, to look into that which our city is doing in a municipal way along the lines you are following, you will find that the city of Seattle is possessed of the most modern methods of guarding against pollution and deleterious and unhealthful foods. I wish that our health commissioner, Dr. Crichton, could have been here, and I am sure he would have been glad to have given you some information, particularly along this line.

The results of our healthful climate, air, pure water and the degree and protection and inspection along the lines of your particular mission, have already reflected themselves in this city, which proudly boasts, and can verify as having the lowest death rate of any large city in the United States, a city of nearly 300,000 population, a cosmopolitan seaport city, and, with that, a death rate of something like ten per thousand. That has been, in some quarters, rather sought to be discounted from the statement that our average population is made up of younger and stronger people than Eastern cities of like size, and that, therefore, it is not exactly a fair comparison, when our death rate per thousand is compared with them, and there may be something in that, but there is another test which has been applied which indicates con-

ditions—that is in the matter of infant mortality into which certainly none of this other element of comparison could come. Infant mortality here is lower than in any other city of our size in the United States. So that we feel that we have a right to welcome here those who, in other cities, and in other states, and all over our land, are working, for the benefit of the people whom they serve—those who are bettering conditions along the lines of health, particularly as in your case, along the line of pure food.

Now I observe by this program that you have certainly a busy three or four days ahead of you. You have not been figuring out a program here for amusement or entertainment very much. You are evidently going to the bottom of the very detail problems that are confronting you in the various states of this country, but I do hope that between these sessions you will find the time, if you have not already done so, to see something of our city.

We believe that Seattle is a unique city in many respects, and possibly more than all in this respect. We think that we have a city which has just about as much of scenic beauty within its own city limits and immediate environments, and that we are set here in the middle of about as grand a landscape, generally speaking, with the Cascades to the eastward and the Olympics to the westward, and the wonderful intricacies of Puget Sound and these lakes and rivers—altogether we believe that there is here a combination of as beautiful a city with as scenic surroundings, with such commercial opportunity combined, in a location as there probably is in any place on earth. I don't feel I am indulging in any excess of civic patriotism when I make the statement, for I have had the privilege of traveling much in other cities and other lands, that I do not believe that there is on earth, a place which has the present and prospective commercial and industrial opportunity that is set in the midst of so much scenic beauty as exists right here in Seattle. If there were not here a commercial city, a city with a great metropolitan future, this location and this vicinity would attract tourists of our own, and every land, by reason of its scenic and climatic advantages as a summer playground for our country. And to feel that here in the midst of all these healthful, beautiful surroundings of nature, we can have at the same time a great commercial opportunity to build up what we believe is to become one of the great world's cities, altogether, constitutes, in our judgment, Seattle as a unique city. Even within the fifty-eight square miles of the land area, and about as much of the water area that is included within our municipal limits, you will find, if you have the time—and I hope you will be able to get it between your busy and useful labors here—you will find a wonderful degree of preservation of the natural beauties, the primitive forests on many of these hill-sides—mountain-sides you would call them, as compared with some of the Eastern elevations—and rolling elevations of the prairies upon which are still the evidences of nature, which we proudly preserve and cultivate and which we propose to keep here, so that however large our city may be, there will always be in these parks and on the shores of these lakes and with the expanse of the lakes themselves, enough of pure air and of scenic beauty, that even those who will not feel that they have the means, so that they can travel farther, can get that degree of enjoyment which everyone should have, even without leaving the city limits. And I hope, and invite you while you are here to just enjoy yourselves to the utmost along these lines. We are proud that Seattle has these features to show to you. I shall leave it to Dr. Kane, the president of the University, to tell you something of these beautiful grounds of the State University, upon which you are meeting here today, of which Seattle and the State of Washington are indeed proud.

Now, without taking any more of your time, gentlemen, for I know that time is valuable to you who have come across the continent to do this work in the interest of all of us, I give you gladly, from the heart, a welcome to this city of Seattle, and wish you Godspeed in your deliberations for the good of our people, and for the good of the people all over our land. (Applause.)

The President: The address of welcome will be responded to by another member of this Association, who will tell how glad we are to meet here and how much we all think of the city. Before that, however, I am going to ask Dr. Kane, President of the University of Washington, whose hospitality we are enjoying for this meeting place, to let you know, as he has me already, just how welcome we are, and tell you something of his work here.

Dr. Kane: Mr. President and members of the Association of American Food and Drug Officials: I take pleasure in

this sincere and cordial welcome which has been extended to you on the part of our mayor of the city of Seattle, and in the name of the University of Washington, on whose campus you are holding your sixteenth annual meeting, and in the regretted absence of our Governor, in the name of the state which this State University represents, I wish to extend to you greetings and bid you a sincere welcome here. We wish to welcome you as a tribute that is due, and an honor which we are glad to pay to your Association, which is doing a most important public service, and to show you that we appreciate that service.

As representing the University, I wish to welcome you as co-laborers, a great association of applied sciences which is giving all the people the direct benefit of scientific methods and results of your scientific investigations. Now, I feel that we may claim to be co-workers with you in this public service for the reason that this University, to the extent of its opportunity and resources, is rendering a public service through the advantages of its laboratories and equipment and experts



CHARLES W. JOHNSON,
Dean of the College of Pharmacy, University of Washington.

in the various lines assembled here primarily for educational purposes. You are doubtless aware, but possibly some of you in the older states may not be aware, that the State University, in a certain sense, in contrast with the older and endowed universities, is regarded as an essential part of this Association. The first line of work that might be mentioned is the relation of the State chemists to the State Dairy and Food Commission. Similar work is being done at the State College, another one of the State institutions, and in our laboratory in this building throughout the year one man is giving his entire time to this work, aside from the time the director himself gives, who is responsible and takes the responsibility for all of the work, and we are analyzing in our laboratory just about one hundred samples a month, on an average, and on this work a report, I think, will be made by the Chairman of the Commission. In the same way the head of our Department of Geology serves as State Geologist. A laboratory is maintained here for the City Analyst of the State Food Commission. The head of our Botany Department serves as State Botanist. Our Municipal Engineer has served as Sanitary Engineer to the State Board of Health, and he has recently been made a member of that board so that, as the chairman puts it, he may have a vote the same as given to the others. The Dean of our Law School is

serving on a commission for the overhauling of judicial procedure, and so I might also enumerate the work that is being done in coöperation with the departments of the Federal Government.

In our engineering building, which is on the ground and which I hope you will visit before you leave, there is a timber testing laboratory in the interests of the greatest industry in the state. In that laboratory the quality of the timbers which the state possesses are analyzed and determined and the result issued in the form of bulletins, so that the timber from this section may have its regular and authentic ratings in the markets of the country. Another building that was pointed out by one of the delegates as you came in is that of the work being done in the mine rescue training station, where training is given especially to the coal mine operators of the state in the use of the appliances and the devices for the protection of life in time of disasters in mines. That is another station which I wish you might visit while here.

The last work to be installed in coöperation with the Federal Government is work on the by-products, particularly of the logged off lands, looking to the time when our timber products will not be so important as they are today, and seeing if we cannot have here a subsequent great industry, such as they had in the lumbering states of Michigan and Wisconsin. So these will illustrate the lines of coöperation in which the University takes part and on which we claim we are coöperating with such associations as this in doing public service.

Aside from these, I might mention the departments of the University itself, the structural materials testing laboratory, where any builder or any public official may have any timber or any sort of building material tested and its exact qualities determined by impartial officials, and with an impartial report. Another is what we call our testing bureau, where all kinds of measures and weights are standardized and tested, and in that way we have avoided for our citizens a number of law suits, which would have resulted in much bitterness as well as expense. Another department is known as the Department of Child Welfare, and has to do with defective and backward children, and is sustained by a private endowment, or private bequest, and the last department to be installed in this work of a public nature or public service is the organization of all the work that it done in the University of Washington, through what is known as the extension department, which is maintained by most of the state institutions, not only in this state, but in the states in general. So, I believe this will suggest to you what I have claimed, that we are co-workers with you in public service. I trust it will also serve to make you feel at home among us, and trust in this way and in any other way possible we may do what we can to add to your pleasure, and to the profit of your meeting here, and if we can add to your pleasure and profit, it will be of the greatest possible pleasure to us, and so in the name of our University I will bid you a sincere welcome. (Applause.)

The President: Dr. Kane's talk has suggested to me again one of the fundamental principles of this organization—I mean coöperation. Mr. R. M. Allen of Kentucky will present to our kind hosts our thanks for their courteous hospitality. Mr. Allen will now have the floor.

RESPONSE TO ADDRESS OF WELCOME.

By R. M. Allen.

Mr. Mayor and Mr. President of the University:

When Dr. Brown wrote to me about a week ago asking me if I would respond to this address of welcome, Commissioner Bailey loomed up in my mind. We had been out to Oregon a couple of times, and kind of training in his hand wagon, and we thought that Oregon was the only state on the Pacific Coast and all that sort of thing, and I said, "How am I going to Seattle and say anything big of this very hospitable city you have, Mr. Mayor?" I had read all about the way you dragged these hills into the bay to fill up and make room for your city, and when we arrived in town last night, I asked the "cabby," or whatever you call him, as to where the hills were that you had dragged down. I asked him why the hills were dragged down, and he said in order to allow tourists to see your beautiful city. I came into the hotel, and seeing Commissioner Bailey, I said, "Commissioner, we had some mighty fine cherries as we came along." And he said, "We have some cherries in Oregon about that big (illustrating.)"

We find on the coast you have a very healthy rivalry. If you meet a man from Vancouver he talks about Vancouver. When you come down to Portland you hear about the big

Portland Peak, and when you come to Tacoma, they speak of Mount Tacoma, but up here they call it Mount Rainier.

It has been very interesting to me to come to the Coast for the third time. It is like reading a good book the second or third time. With interest you will read it on these occasions; at first you see the general grandeur and the general waste, and this time I have seen more development, I have seen the prairies reaching out just a little further, where before the prairie dog was. Where before there was nothing but the rustling range, you can see the wheat fields growing just a little farther, and you can see the irrigating engineer holding out hope to these people—hope that they will create even a greater West than we have now.

When the Lewis and Clark trail was projected by President Jefferson (or as we call it in Kentucky, the Clarke and Lewis trail, for Clarke was a Kentuckian), they went to the mouth of the Columbia, and with them the Astors, who helped build New York, and there laid the foundation for the metropolis of the west, but the designers of the empire who built the capitol on the beautiful Bay of Naples had no more beautiful



R. M. ALLEN,
Head of Food Division, Kentucky Agricultural Experiment
Station.

a body of water than you have here, and Seattle is destined to be one of the greatest, if not the greatest metropolis of our expanding commerce towards the east.

When we consider what the west possesses—its fruit, its wheat, its mountain grandeur—and when we consider that Oregon and Washington have all that, and in addition, timber, and a wealth of fish and dairies, to say nothing of the scenery, any one of which other states would be happy to possess, you have just cause to be proud.

The Association, as you have well said, is not one of large numbers, but it is one of these associations that has been a power for good, because of the fact they have had the lever of the law in establishing a pure food movement and all that goes with it throughout the United States. When we came to Oregon on our first trip, we came as a body of fighters for laws. We have come here, having established our laws, differently, it is true, in some of the states, from the laws in other states, but having established them, we are giving to the country the facts the analysts have collected from year to year. It may not have been public sentiment that affected our state legislatures, but having put these laws on our statute books,

we come here with a program for considering the welding of these laws to an effective uniformity through which there will be no access whatsoever for the adulterating and misbranding of food products. (Applause.)

We come here, Mr. President, with problems that we believe to be important, and when the bacteriologists of the country told us much of the disease came from certain germs and when they told us further that the food and water are the chief means of transmitting these germs from one sick patient to another, we are faced with the great problem of sanitation, one that does not carry criminal intent, but one that was merely lack of these fundamental scientific facts, and it is to the university we must go for the broader teachings, and a broader application of these principles that is going to make our food pure and healthful as well as truthfully branded. We have got in that situation where we have cleaned up our national packing plants by thorough sanitation of slaughter houses throughout the country. We have cleaned up our national slaughter houses by the local plants. We have our fruit and vegetable manufacturing establishments, and we are going into and teach these principles of bacteriology which will make the process of preservation less difficult and bring more confidence and all that sort of thing, and it is certainly an inspiration to consider such a program in beautiful Seattle, and I thank you, Mr. Mayor, and I thank you, Mr. President,

Mr. Allen of Kentucky: And I move that it be made the first order of business on Thursday.

The President: Gentlemen, you have heard the motion. Discussion is now in order.

Mr. Emery: I would like to ask whether this motion contemplates that these amendments be offered now, and submitted to the committee or submitted without public discussion.

Mr. Allen of Kentucky: I suggest that they be offered either way, Mr. Emery, and that they be offered to the house and handed to the committee.

Mr. Emery: With that understanding I have a few amendments I wish to offer now.

The President: I think we are speaking now of the question of deferring this action. I think that is the only thing before the house. I do not think amendments to the constitution would be in order at this time.

Mr. Emery: I raised the question whether it would be in order.

Mr. Allen of Kentucky: I will include in my motion that the committee, or the Association, receive the amendments, and that they be referred by the Association to the committee.

Mr. Davies of Washington: I want to understand if there will be no opportunity to offer amendments to the constitution except through the committee, or whether there will be opportunities Thursday.



DELEGATES AND VISITORS AT THE SIXTEENTH ANNUAL CONVENTION

from the bottom of my heart for the opportunity you have given us and our beloved brother commissioner, Mr. Davis, that we are to have while we are with you this week. (Applause.)

The President: The next order of business will be the ratification of the new constitution. You will recall this constitution was before us at New Orleans, and I believe, at Duluth, and now awaits your final action.

Mr. Allen of Kentucky: Mr. President, the chairman of this committee has submitted a report in which it points out there has been one or two criticisms which can be cured and which can properly be thoroughly cured by making suggestions as they may occur, and if it is in order, I want to suggest that the Association continue in its present organization as it started, and we be given between now and Thursday to make the report with respect to these amended suggestions that Mr. Emery and others have to offer, in order that we can amend as we believe the present constitution, which will have all the corrections and be ready for the adoption of the body. That seems to be a better plan than writing them and reading them from the floor.

Mr. Jones of Illinois: I second that motion.

Mr. Allen of Kentucky: It seems to me, Mr. President, to be perfectly in order, when the constitution is finally reported, it will be up for adoption, or whatever action the Association wishes to take.

The President: Gentlemen, as I understand the motion, it is requested that this be made the order of business this morning. Am I correct? Mr. Allen said the amendments proposed to the constitution may be presented either to the committee or on the floor, as you may choose. The committee desires that they be presented to the committee. That does not stop the moving of the amendment on the floor, if a member chooses to do so. All in favor of making this, the consideration of the new constitution, the first order of business on Thursday, will please say "aye," and all opposed say "no." (Motion carried.)

We pass then, to the next order of business, which, I believe, is the President's annual address. I have adopted the belief that we are met to compare notes, and learn how each other stand, and give to each other all that we can of good. I have chosen for the subject of my address, "Recent Progress in Food and Drugs Control Work." Whether I have succeeded in bringing anything forward which will merit your consideration, or which may establish the precedent at least, to

have this matter considered—not necessarily by the president but some other member of the organization every year—will appear better after you have had consideration of the paper than it will now.

PRESIDENT'S ADDRESS.

Recent Progress in Food and Drugs Control Work.

The word progress—meaning, according to dictionary definition, a "going forward," "advance," or "improvement"—it is profitable to us, and perhaps necessary, to take a backward look over the field of the control of adulterations and misrepresentations in the sale of food and drugs; to consider the present status of our work, for the purpose of measuring such advance; and then to look a little into the future.

The so-called "pure food and drugs laws," state and Federal, are regarded by the people of the United States as their own special care. The purity and wholesomeness of foods are matters of every-day thought; reminders of their importance are constant. Therefore, the public attention is always on the administration of such legislation, and it is unnecessary to remind this audience of recent instances. A faltering in duty, or a yielding to the requests of special interests, is quickly recognized and most heartily condemned. On the other hand, faithfulness receives that generous reward which the Ameri-

Meantime, there had been efforts to obtain from the Congress of the United States, legislation which would prevent the shipment into states protected by food laws of adulterated materials, which shipments, by virtue of their interstate character, the states were unable to satisfactorily handle. The movement to this end, aided as it was by civic organizations and especially by the organized women's clubs of the country, finally culminated in success in the passage of the Federal food and drugs act of June 3, 1906. This act, productive as it has been of immense good, has nevertheless not withstood the assaults of its enemies, and the time is now ripe for such amendments as will in some measure fulfill the purpose which it was supposed to serve.

The passage of the Federal food and drugs act served to encourage the advocates in the several states of purity in the food and drug supply, and, following it, one state after another has dropped into line, until at this time every state in the Union except the recently organized Arizona and New Mexico have food laws on their statute books, most of which follow essentially the lines of the Federal act. Each of these states, except Arkansas and West Virginia, has machinery for the enforcement of such laws, the two states named being without appropriation for that purpose.

Moderately successful efforts to provide for protection against harmful or deceptive adulterations in foods have thus



OF THE AMERICAN ASSOCIATION OF FOOD, DAIRY AND DRUG OFFICIALS.

can people are ever ready to give to men who serve them well.

Since some form of adulteration appears to be as old as civilization, we may pass over early history and come at once to that with which we are directly concerned, namely, preventative measures in our own country. Here, as elsewhere, the detection of adulteration was difficult before the science of chemistry had advanced to such a point as to enable its use in a manner which would carry conviction to a court and jury. Many regulations and laws against various specific adulterations were promulgated in various states in the early and middle part of the last century, but the first systematic attempt to regulate the whole class of food and drug adulterations appears to have been made by the state of Massachusetts in 1882, which in that year established under the State Board of Health its present efficient Food and Drug Inspection. During its existence this department has analyzed the large number of 205,709 samples, of which 59,521, or 28.3 per cent have been found adulterated. More than half of these were milk. Other states were not slow in following the lead of Massachusetts, notably those in the northwest, and to such proportions had this movement grown that in 1896 this Association was organized by the State Food and Dairy Officials.

been made. But the progress of sanitary science, based on a wider knowledge of bacteriology, had long since indicated to informed persons that this, while the most obvious means of safeguarding a food-supply, was only a part of such effort; that a loaf of bread, for instance, though made of pure unbleached flour, free from admixture with corn flour, or the obsolete adulterant alum, might finally, by virtue of being made in an unsanitary bakery, handled by diseased operatives, and exposed on its way to the consumer to germs carried by flies and street dust, become much more unwholesome than bread made from impure materials. Some states had already recognized by legislation this condition of affairs when a committee of this Association reported to this body in 1908 a general form of statute designed to assure the handling of foods in a sanitary manner. It is unnecessary to do more than call attention to the great necessity for such regulation, consequent upon the transfer by our present industrial civilization of the production of food-stuffs from small units to large; in other words, from the farm to the factory. This "uniform sanitary food law" or its equivalent, is now enforced in the States of California, Illinois, Indiana, Idaho, Kansas, Kentucky, Louisiana, Maine, Nebraska, New Hampshire, New Jersey, North Dakota, Oklahoma, Ohio, Pennsylvania, Tennessee,

Utah, Virginia, Wisconsin, and the District of Columbia—twenty-three in all.

In most of these states this law has been placed upon the statute books entire, its administration being placed under the already existing food and drugs departments. But in the state of Pennsylvania, if I am correctly informed, it is administered directly by the State Board of Health. In other states the results have been reached indirectly. Thus the Food Commissioner of Maine has the power to make rules and regulations which have practically the effect of law; a short amendment to the Maine food and drugs act declares that food is adulterated "if in the manufacture, sale, distribution, transportation, or in the offering or exposing for sale, distribution or transportation, it is not at all times securely protected from filth, flies, dust or other contamination, or other unclean, unhealthful or unsanitary conditions"; the rules and regulations for the enforcement of this section then being framed on the lines of the sanitary food law, the desired result is accomplished. Very much the same process appears to be in operation in Ohio and Louisiana. The amount of work ac-



L. P. BROWN,
Retiring President of the Association.

complished under this law by a well equipped inspection is enormous and the benefit to the food supply, and particularly as a means of education in public hygiene, is incalculable, the latter being not the least of its advantages.

The two pieces of legislation just named, then, constitute essentially the body of the food and drug protective legislation in the United States. As suggested, most of these are modeled upon the Federal act. An examination of some points of difference will be of interest. Thus, we find that the seven states of North Dakota, South Dakota, Nevada, Minnesota, Connecticut, Nebraska and Florida have already enacted a so-called "new weight law," providing for statement of weights and measures on the labels of all foods in packages. Nine states specifically forbid the use of preservatives, though some of these except therefrom benzoate of soda and sulfites in specified small amounts. Most states appear to instruct their officials to make rules and regulations for the carrying out of the acts. These rules and regulations may or may not have the effect of law, though in the state of Min-

nesota it is specifically provided that, after a prescribed publication, they shall have such effect. In certain of these states, the rules, regulations and food standards of the United States Department of Agriculture must be followed.

A provision of decidedly doubtful benefit is that in the law of eight states, which exempts from prosecution a dealer protected by a guaranty from without the state. A partial departure from this is the provision in the California law which instructs the Attorney General immediately to notify the Attorney General of the United States of such violations, and that in Tennessee, which recognizes no guaranty whatever, after the first offense or after a prescribed publication of the illegality of any article. It has been the experience of the speaker that reference to a guaranty without the state may have the effect of allowing the continued sale of illegal goods, since the Federal inspection naturally cannot always give the matter immediate attention.

The Federal act allows seizure of illegal goods, and several of the states do the same. There appears to be some question in the minds of authorities as to the efficiency of this procedure. In any event it must be used very carefully, though in certain cases it is of benefit.

A marked tendency in the states having had legislation the longest is a disposition to cover many different foods by laws. In one such state I find, in addition to the general food and drugs acts, acts against the adulteration of malt liquors, syrups, molasses and glucose mixtures; maple syrup mixtures; mixed jellies, jams, preserves and fruit butters; sausage, as to added cereals; and provisions as to labeling of canned goods; poisonous medicines, baking powders, etc. Such legislation ties down the executive officer to hard and fast rules; is so inflexible as to interfere with due progressiveness and may be as thoroughly covered by general laws allowing the executive officer, or preferably a properly qualified board, to determine what are, in detail, proper methods for enforcing the law.

Publicity for the work of a food control is an absolute necessity if the maximum benefit is to be derived from it by the people who maintain it. Most states depend upon bulletins, having a limited circulation, to give such publicity. The states of North Dakota and South Dakota provide for the publication at stated intervals, in the official county papers, and at the expense of the counties, of the results of their work. This is the best means of publicity so far devised. It gets straight to the people, and permits of bringing directly to any community such matters as may be of interest to it and not to others. Tennessee allows of publication in three daily newspapers, fines under the food and drugs act being set aside for that purpose. Nebraska requires a list of violations during each year to be sent to the County Court Clerk of each county in the state, to be held by him for public inspection, while in North Carolina such publications as the Board of Agriculture directs may be made.

Some miscellaneous statutory provisions in the various states observe notice. Thus, the states of Pennsylvania and Minnesota forbid the use of coal-tar dyes of any sort of candies. In Connecticut and Massachusetts, hotel and restaurant keepers must post placards in their places of business informing patrons as to the use of oleomargarine or renovated butter. In Illinois, Nebraska and Minnesota, persons receiving milk in containers are required to wash such containers thoroughly before returning them to their owners—a provision serving alike decency and cleanliness which I should be glad to see made general. The state of Florida forbids the departure from United States Pharmacopoeial or National Formulary standards of any of the so-called "official" drugs, and the states of New Jersey and Tennessee forbid such departure in certain drugs which are commonly sold in package form by country stores. The Maryland law contains specific provisions for the inspection of marketed waters, and in Wisconsin ice wagons must bear a label stating the place where such ice was cut, both provisions tending to prevent contamination. Illinois requires the giving of duplicate samples and makes illegal the failure of any transportation line to assist in the enforcement of the act. Oklahoma requires the labeling of bread with the day and hour of baking and requires that all bread over seventy-two hours old must be sold as stale bread, and Tennessee does not exempt substances having so-called "distinctive names" from penalties for misbranding. Finally it may be said that the only two food and drugs departments which are self supporting—indeed, turn money back into the treasury of the state—are those of Ohio, which derives a revenue from certain liquor taxes, and of Pennsylvania, deriving a revenue from oleomargarine licenses. The same thing might be said of certain inspections in the southern states, which are attached to agricultural departments, and derive revenue from fertilizer taxes,

but in such cases the source of revenue has no connection with foods or drugs.

It is not intended to suggest by the catalogue just given that the interesting provisions of state laws are exhausted, nor that other states than those named may not have them, for the search for such things is laborious and time-consuming. But they will serve to indicate the diversity in details among state laws, and the absolute impossibility of ever attaining anything like substantial uniformity in the details of legislation and administration.

These variations of detail do not appear to extend to the administration of the sanitary food law. There the issues, being simply those of common cleanliness, based on undisputed sanitary and bacterial knowledge, are more clearly defined; there is little or no conflict of opinion as to details; and, as we have seen, though the roads may be different, they all reach the same place finally.

I have compiled figures intended to show the great extent of the activities of the food and drugs inspections in the United States, summaries of which are given in the accompanying table. The figures are intended to cover, as nearly as possible, the fiscal year ending July 1st, 1911, which is the last for which figures are available. Exceptions to this are properly noted. The figures are compiled from personal letters and from publications. I desire to acknowledge here my obligation to all who have responded to my request for information. Interesting aspects of this table are the following. It appears that there are, including the United States Bureau of Chemistry, 945 persons reported as engaged in the policing and investigation of our foods and drugs. To these figures should be added a certain number of clerks, so that the true figures should be probably between 1,100 and 1,200. In each year these men analyze nearly 100,000 samples of foods and drugs, and the approximate total amount of money spent is \$1,255,000. Nineteen of the states report making 122,216 sanitary inspections of food-handling establishments, an average of 6,432 per state. It appears that the average food control employe earns his salary. Finally, the average state reporting spends \$22,973 per annum for this work.

The two features of our work on which most stress is laid by commissioners writing are (1) education and (2) sanitation. The importance of the former is indicated almost every time any of us fails to get a conviction in court, for our courts and juries, like our legislatures, are on the average a moderately fair reflection of the people who make them. The usual method of educational work, aside from personal conference with interested parties, is by exhibits at fairs, conventions and the like, by coöperation with women's clubs, civic organizations, etc., and particularly by means of the exhibit trains which are now so popular and which were so well explained to us last year by gentlemen from Louisiana and Minnesota.

The Louisiana State Board of Health reports having issued in the past eighteen months 671,900 pieces of literature, only a small portion of which, it is true, was on food inspection, but practically all of it was sanitary instruction.

A glance at the activities of some of the inspections will be of interest. The United States Bureau of Chemistry is still the largest single worker in the field, with an appropriation of over \$350,000. The next largest expenditure is in Pennsylvania, of some \$83,000, followed by Illinois with about \$73,000. The latter state appears to lead in number of analyses made, with some 11,000, followed by the Bureau of Chemistry with 10,000, and by Pennsylvania with 8,200, New Jersey with 7,260, Massachusetts with 7,283, Kentucky and North Dakota with about 5,500 each, and the rest of us "trailing." Recently several inspections have been charged with the enforcement of the weights and measures laws of their states. This puts greatly increased duties on those departments. In the state of Kansas, which has had such an arrangement in part for several years, 50,208 inspections of weights, balances and measures were made in 1911; in the state of Indiana, 6,603 such inspections during the month of April.

A question which will probably come home to all of us has been raised by the commissioners of Utah and Oklahoma. These gentlemen report difficulty in getting prosecutions after referring cases to the local prosecuting attorneys, and suggest that legal assistance should be provided by statute for the departments. Having experienced a like difficulty, I am prepared to endorse this suggestion.

Both in food adulterations and in sanitary work there appears to be a tendency at present to take certain lines and work them thoroughly. In the food supply at large, adulteration has been so greatly reduced as to much decrease the necessity for close watch thereupon. This is due largely to a diffusion of knowledge as to the requirements of the law, and to the control over interstate trade of the Federal Bureau

of Chemistry. But certain lines, such as eggs and milk, are sold largely in the same state in which they are produced and such lines are being followed closely. Drugs are likewise receiving much more attention than formerly—none too soon, if the experience of those who have worked on them is a criterion. The deficiencies here come both in the official pharmaceuticals and in the misbranding of patents, and education of the druggist on the one hand and of the general public on the other, appears to be the obvious remedy for the conditions. In this connection the plan for the education of the druggist adopted in South Dakota, which will be more fully explained in Dr. Cook's paper, seems to me so practical as to merit your consideration.

A line which is being stressed in several states is the matter of freshness in retailers' stocks, the retailers' stocks being gone over and the suggestions made in each case that old stock be disposed of. A part of this is the condemnation and destruction of spoiled canned goods which appears to be a general practice. Retailer's labeling is also receiving much attention.

In sanitary work the same tendency to specialize is notable. Small slaughter houses appear to be receiving most attention, and the conditions in most of them indicate the greatest need for such work. Pennsylvania and New Jersey are doing notable work in this field. The proper handling of bread, including wrapping, the proper washing of glasses in saloons and soft drink places, and the cold storage matter, are all being "featured."

Many of the seaboard states are systematically investigating the sanitary condition of the oyster and clam beds, the states of New Jersey and Virginia being particularly active in this. The former state now has under construction a boat specially fitted for this purpose. The state of Washington is giving special attention to the condition of the fish brought to its docks. The screening of food stuffs from flies is naturally being enforced, often under difficulties in conservative states, for as I write a newspaper story comes to my attention, of how the dealers in the markets of old New Orleans threaten to "go on a strike" for the purpose of creating a food famine if Dr. Dowling of Louisiana persists in enforcing his orders for screening such places. Finally I want to make special mention of the spread of the score-card system in the inspection of all food-handling establishments. The best developed of such cards are naturally those of the United States Bureau of Animal Industry for the scoring of dairies and milk-depots, but the cards for other industries, as now developed, serve an excellent purpose, and it is to be expected that their deficiencies will be corrected as experience with them increases. The state of Louisiana uses the score-card system on dairies, city milk plants, bulk milk stores, drug stores, groceries, meat markets and hotels and restaurants, the states of Indiana and Kansas doing the same, while Maine scores all of these with food factories and confectionaries in addition. The advantages of such a system are obvious; it not only quickens the perceptions of the inspectors, and informs the public, but enables the dealer to judge his relative standing; to correct bad conditions or to brag about a good showing, the latter to the manifest detriment of his less cleanly competitor, who is thereby incited to improvement.

Having now taken a somewhat comprehensive survey of our field, let us endeavor to find out how much this means of improvement.

Statistics which would enable accurate comparison over any period of years are not at hand, and for the whole country are certainly not available. But it is matter of knowledge among informed persons that conditions are vastly improved over five years ago; that, for instance, the old use in certain canned goods of injurious preservatives has entirely ceased; that few butchers use "Freeze-em" or "Iceline"; that the ethereal flavors no longer masquerade as fruit extracts. But the field is large and there is yet much to do; moreover, in this work, as in all others, the only condition of safety is eternal vigilance. A letting down of the bars even for a moment is taken advantage of by the forces of greed and fraud, and a withdrawal of inspection would speedily result in worse conditions than ever.

As to the real efficiency of a proper oversight of foods and drugs, the figures of the Massachusetts Inspection will be of interest. The following table shows the percentage of adulterations in 1911 as compared with the whole life of that inspection:

PERCENTAGE OF ADULTERATIONS, MASSACHUSETTS.			
	1911.	30-year period.	De-crease. In-crease.
Milk	19.5	33.2	13.7
Drugs	19.6	33.5	13.9
Foods (exclusive of milk).....	23.7	19.	4.7

The decrease of adulterations in milk and drugs is striking. The increase shown in food adulteration named appears to emphasize the broad field of the work, in that it may be explained by the probability that some hitherto untouched lines had been up in that year. The result is in striking contrast to the experience of England and Wales, as indicated by a table given by Dr. Otto Hehner and covering a period of twenty-seven years, as follows:

Year.	—Number of samples—		Percentage of adulteration.
	Examined.	Adulterated.	
1877.....	14,706	2,826	19.2
1884.....	22,951	2,535	14.8
1889.....	26,956	3,096	11.5
1894.....	39,516	4,060	10.3
1899.....	53,056	4,970	9.4
1904.....	84,678	7,173	8.5

Another table given by Dr. Hehner shows the interesting facts that the percentage of adulteration of drugs in 1904 was greater than such percentage in both food and drugs, that the greatest percentage of sophistication in foods was in wines, followed by spiritous liquors, with milk not far behind. Among drugs, spirit of niter, cream of tartar, magnesia and our old friend tincture of iodine bear off the palm for deficiencies. These results accord well with American experience, and give the hope that as our work proceeds in this country, we shall attain even better results.

Touching now the present status of food law enforcement, it must be said that the United States courts have succeeded in taking a large proportion of the teeth out of the Federal food and drugs act of June 30, 1906. The greatest single blow which the enforcement of this act has received was from the Supreme Court of the United States in the well known decision on the O. A. Johnson Cancer-Cure case, which decision entirely removed the jurisdiction of the act over misrepresentations on the label, as to the therapeutic effect of drugs or medicines. It is noteworthy that this decision was by a divided court, there being three members of the court, Justices Hughes, Harlan and Day, who rendered a dissenting opinion. This dissenting opinion went into the matter of the obvious intent of the Congress and was, to persons informed in food and drugs work, clear, cogent and convincing. Immediately on the rendering of this adverse opinion, President Taft sent to the Congress a forcible message, calling attention to the dangers and deception involved in the patent medicine traffic, and urging immediate revision of the Federal law. Up to this time Congress has not got beyond the stage of hearings on the several amendatory bills now pending. Prior to the rendering of this decision, the Bureau of Chemistry had made very substantial progress in forcing the nostrum dealers to stick to the truth in the claims made on their labels, and in putting out of business many of the worst of them. A portion of this good still remains, as shown by the more careful wording of labels on goods on sale in the several states. But the strong association in which these gentry are bound, with its millions of money, has taken fresh courage from this decision of the Supreme Court, and it is disheartening to reflect that a large part of a supposedly accomplished task must be done again. Encouragement is to be derived from the knowledge that this decision does not bind a large number of the states, as well as from the hope that state commissioners will rapidly take up the matter, and do everything possible to help remove this damnable commerce from American life. The public, likewise, is being educated, and many courageous and independent newspapers now refuse patent medicine advertisements, so that on the whole, the grip of these people on our credulous sick has been somewhat loosened, and the future is hopeful.

A recent decision by a United States Court in New York, in a case against J. L. Hopkins & Co., involving labeling on crude drugs, appears to offer a very dangerous precedent, if the decision is sustained by the higher courts. On the other hand, very distinct encouragement is to be derived from a recent decision of the Supreme Court of the United States, the case coming from Indiana and involving the constitutionality of the cattle foods law of that state. One M. W. Savage of Minneapolis, Minn., engaged in the manufacture of a so-called condimental stock food, resisted the orders of Indiana that he place on his label the ingredients of this stuff. Mr. Justice Hughes, in announcing the decision of the Court, declared that the Federal act of June 30, 1906, did not cover the whole field, but left certain powers to the states in the regulation of interstate commerce in foods and drugs, and that Indiana had a perfect right to require such statement

of ingredients. This decision, if correctly reported by the press (the decision in full has not yet come to hand), greatly strengthens the power of the states.

A further decision of value (which, however, has not yet gone to the highest court) is the report of the Master in Chancery in the District Court of the United States, District of Indiana, which has been confirmed by the District Judge, involving that section of the Indiana food and drugs act forbidding the use of chemical preservatives of any description in food stuffs. A suit was brought by Williams Brothers' Company of Detroit and Curtice Brothers' Company of Rochester (desiring to sell within the state certain goods containing benzoate of soda), to test the constitutionality and reasonableness of the Indiana act. The case was under consideration and trial for several months, and the evidence was voluminous, consisting of seventeen or more bound volumes. The finding of the Master in Chancery was that, since it was not proven that benzoate of soda in food stuffs was harmless, and could be used to cover up deficiencies in the material used, the State of Indiana had the power to enact a law forbidding it, and that such a law was not violative of the constitution, either of Indiana or of the United States. This decision is of far-reaching importance, should it be sustained.

An administrative detail in which real progress appears to have been, to judge from the reports of commissioners is the matter of coöperation between the states and the municipalities within them. Great good at a minimum cost can be done in this way. I regret to say that the plans of this Association for coöperation between the several states, and between the states and nation, have not had the attention from state officials that they deserve. The Department of Agriculture had done its part well, but the State of Kansas is the only one from which I, at least, have received any communication as to this. I would suggest that this matter receive your attention at this meeting, to the end that if considered desirable, a plan may be worked out which will insure the carrying on of this important work, which, it seems to me, will do more to promote the purpose of this organization and of the legislation by virtue of which we work, than possibly any other one thing we can do.

The proceedings in the Coca-Cola case having been published recently, it appears that the court, in this case, decided, in effect, that the name "Coca-Cola" was a distinctive name; that the caffeine which the United States sought to establish as an added deleterious ingredient, was not, in fact, an added ingredient, but an essential part of the material, and that, therefore, the libellant's case, as a matter of law, was without merit. Minor points were involved, but this appears to have been the essential element. The court, therefore, instructed the judge to return a verdict in favor of the defendant, which was done. This decision puts an article with a "distinctive name" upon the same plane, so far as regards harmful ingredients are concerned, as a natural product, and would allow any poison (except certain specified habit-formers) to go without labeling into an article with a "distinctive name." I do not cite this case for the purpose of criticizing the district judge (he seems to have had no alternative under the law), but for the purpose of bringing your attention and emphasizing the grave departures from the purpose of food and drugs acts which are possible under this clause as to "distinctive" names, in the Federal act and most of the state acts; departures which, as most of you will recall, have been made not only by proceedings in court but by legal interpretation in administrative offices.

The future of food and drugs control work in the United States appears bright. Despite the great amount of work still to be done, the public is so vitally interested in the subject, and public enlightenment thereupon has been so much advanced that public support should be more general in future and more freely rendered. The most promising line of endeavor at present seems to be the development of educational measures, and such measures should have as their main object, instruction in food sanitation. Such developments will naturally lead up to the passage of sanitary food laws in those states where they do not exist and to a better enforcement of law in states having them. Little less important is greater activity in the improvement of the drugs supply. Here again education of the druggist will be the most direct means of enforcing law. In the case of such things as eggs, milk, etc., education must again go direct as to the source, for if farmers' wives and dairymen know how to produce good eggs and milk, and the pecuniary benefits to be gained thereby, the biggest step towards a good supply of those products is taken.

State.	No. of employees.	No. of samples analyzed.	No. sanitary inspections made.	Spent per annum.
Arizona	No law	.....	.....	.....
California	8	835	5,000	15,000
Connecticut	6	1,406	7,000	22,600
Florida	4	132	.....	6,000
Colorado	14	825	9,000	24,400
Alabama	3	750	.....	15,000
Arkansas	No enforceable law	.....	.....	.....
Delaware	2	.....	.....	.....
District of Columbia	18	.....	.....	.....
Georgia	4	1,456	.....	10,000
Idaho	9	1,101	3,000	20,624
Indiana	12	2,073	11,594	20,000
Illinois	36	11,000	.....	73,000
Iowa	20	2,500	.....	48,000
Kansas	14	888	15,000	(b) 35,000
Kentucky	11	5,575	910	30,000
Louisiana	8	693	(f) 6,000	10,000
Maine	10	.....	.....	.....
Maryland	11	.....	.....	15,000
Massachusetts	8	7,283	.....	16,816
Michigan	26	3,284	(f) 20,926	47,154
Minnesota	19	2,392	.....	57,500
Mississippi	3	500	.....	(b) 5,000
Missouri	8	1,313	10,333	18,429
Montana	Law in effect 1912	.....	.....	.....
Nebraska	7	(c) 1,396	(c) 6,860	(a) 21,440
New Hampshire	5	(c) 1,200	(c) 1,350	5,600
New Jersey	11	7,260	8,683	20,000
New Mexico	No law	.....	.....	.....
New York	20	(d) 6,904	.....	(f) 10,000
North Dakota	10	5,500	2,300	22,000
Ohio	22	1,673	1,635	50,000
Oklahoma	6	(c) 1,200	2,842	15,700
Oregon	5	523	.....	8,039
Pennsylvania	33	8,200	.....	83,083
South Dakota	6	750	.....	8,320
North Carolina	4	1,209	.....	7,500
Tennessee	5	1,075	5,994	11,400
Texas	5	368	852	12,142
Utah	6	960	475	5,087
Vermont	5	.....	.....	.....
Virginia	10	443	2,462	23,500
West Virginia	No appropriation	.....	.....	.....
Washington	10	504	.....	17,660
Wisconsin	24	(e) 2,031	.....	(e) 45,907
Wyoming	4	(e) 495	.....	(a) (e) 9,000
Nevada	3	.....	.....	6,000
Rhode Island	3	.....	.....	.....
South Carolina	5	.....	.....	.....
Totals	465	83,498	122,216	895,941
Bureau of Chemistry	500	10,000	.....	351,170
Totals	965	93,498	122,216	1,254,611

(a) Estimated from appropriations, etc.

(b) Approximate. Covers analytical work by agricultural colleges, etc.

(c) Estimated for 1912 from rate for past year.

(d) Estimated from number of illegal samples reported.

(e) Last year for which information available, 1910.

(f) Estimated from various data.

Mr. Foust of Pennsylvania: Mr. President, I move that this Association extend a vote of thanks to the president for this magnificent paper.

The motion was duly seconded.

The President: The Secretary will please take the chair.

The Secretary: It has been moved and seconded that a vote of thanks be extended to the President for his very able presidential address. Those in favor signify by saying "Aye." Those opposed, "No." The motion is carried.

The President: Gentlemen, I thank you very much for your compliment. As I stated in the beginning of this address, I hope there will be a review of this situation every year by some competent member of this organization, for we should be a clearing house in this work. I thank you again.

The next order of business, is the report of the executive committee, but before we proceed with that, there is an announcement I desire to make: Our hosts have arranged for us very kindly, to have lunch in the dormitory at one o'clock, so that we will adjourn a short time before that hour so that we can accept their hospitality and take advantage of the accommodations that they have provided for us. It appears

that there is no very good restaurant within a reasonable distance of this hall, so that place will be taken advantage of by special arrangement by those who have so kindly provided for this lunch.

In connection with the report of the Executive Committee, the Secretary wishes to make an announcement.

The Secretary: Mr. President, and gentlemen, the next thing on the program is the report of the Executive Committee. It has been the custom in the past to make the report of the Executive Committee and that of the Secretary the same. I suggest that the report of the Executive Committee be made in the Secretary's report, as the Secretary's report.

Dr. Cutler of Missouri: I so move.

The motion was duly seconded.

The President: It has been moved and seconded that the report of the Executive Committee and the report of the Secretary be combined, and that the combined report be read in the order of business, as set forth, as the Secretary's report. All in favor, please signify by saying "Aye." Those opposed, "No." The motion is carried.

The next order of business is the report of the Committee on Coöperation.

REPORT OF COMMITTEE ON CO-OPERATION.

Mr. President and Gentlemen of the Association:

After much delay and considerable correspondence the plans of the Committee on Coöperation that were adopted at the last annual meeting at Duluth, were formally adopted by the Secretary of the United States Department of Agriculture and orders given to the Bureau of Chemistry to put the same into practical operation on behalf of the government. In accordance therewith, confidential information has been given to the various state commissioners of seizures of food and drug products, and prosecutions certified to the department of justice for criminal action under the Federal food and drugs act.

It goes without saying that this information is of very great value to the commissioners, as it puts them on their guard as to the name and location of presumably illegal products, whereby they may, with greater ease and certainty, bring to bear the provisions of their own state laws against such products sold or offered for sale in their jurisdictions. Perhaps no less important and valuable, from receiving such information, is the fact that gradually, and perhaps unconsciously, the states are brought to a more uniform method of interpretation concerning the various food and drugs laws, and a more uniform method of law enforcement, which will ultimately, in so far as the various state laws will permit, bring about the much desired uniform food and drug rules and regulations and administration.

One important part of the plan of the committee has not yet been promulgated by the Department of Agriculture, namely, a simplified method, advocated for commissioned officials to proceed under the Federal food and drugs act. We are of the belief, however, that that matter will be forthcoming, inasmuch as the Secretary endorsed, without reservation, the entire plan of the Committee on Coöperation.

The chief disappointment that has come to the committee has been the lack of response on behalf of the commissioners, themselves, in putting into practical operation the various provisions of the plan. I cannot believe that this has been due to a lack of appreciation of the plan itself, but rather to the fact that probably many of the commissioners thought they had nothing of unusual interest to report. The committee is of the belief that each commissioner could, and should by a little effort to secure some confidential information, on undertake the solution of some hitherto unsolved problem which, if given to the commissioners, would be exceedingly valuable, and we express the hope that such action will be taken by every commissioner within the very near future. There are a multitude of problems in pure food, drug and dairy control that have not yet been solved. The field is ripe to the harvest, and the opportunities for original research are abundant. There is, therefore, no good reason why every state should not during the course of the coming year contribute something to the other states and to the Federal government that will be of great interest and probably of equally great value in food and drug control.

It is not more machinery that we want, but an aroused enthusiasm among the commissioners themselves, to carry into practical effect the committee's plan adopted at the last annual meeting.

The committee has held no meetings during the time between the sessions of their Association because of lack of funds, on the one hand, and because of the delay on the part

of the Federal government in the final adoption of the committee's report, on the other. It is believed that if the Association had some fund whereby under the direction and consent of the executive committee, meetings might be called, if found necessary, more and better work could be accomplished.

Respectfully submitted,
(Signed) S. J. CRUMBINE, M. D., Chairman.
R. M. ALLEN.
ALFRED N. COOK.
L. DAVIES.

The President: If there is no objection, the report of the Committee on Coöperation will be received.

The next thing on the program is the report of the Committee on Cold Storage.

REPORT OF COMMITTEE ON COLD STORAGE.

The demand for cold storage legislation fostered largely by legislators desirous of reducing the high cost of living, but possessed of little or no information as to the facts, has precipitated a flood of ill-considered, badly drawn and wholly futile measures upon our state assemblies. Several of the states have fortunately secured reasonable legislation, but in many others the bills presented have been defeated, and it is altogether probable that coming legislative sessions will again consider cold storage bills. In order to prevent the passage of ill-advised legislation and to unify the laws on this subject, your committee has drafted and presents for your approval a measure which it believes to be adequate, both in respect to definition and regulative provisions. In the drafting of this bill your committee has made a careful study of the laws now in force in the states of California, New York, New Jersey and in Indiana, and of the report of the Massachusetts Cold Storage Commission, the Cold Storage Investigating Committee of the Chicago Association of Commerce, and the voluminous reports of the hearing on the cold storage measures introduced from time to time in the Congress of the United States. It has also consulted experts in refrigeration, cold storage operators, and dealers and brokers who do a large business in the storage of foodstuffs.

Your committee believes that the bill presented for your consideration is fair to the industry and the consumer alike. It embodies in its several sections the provisions which other states and investigating committees have felt to be essential to a proper cold storage law. It, therefore, provides for a sanitary inspection of all plants intended to be operated for the purposes of cold storage, and if such inspection shows suitable conditions it authorizes the granting of a license. It further provides that an accurate record be kept of receipts and withdrawals of articles of food, and these records are constantly accessible. It further provides that a quarterly report shall be made to the authority invested with the enforcement of the act. It provides that no goods shall be stored which are deteriorated or improperly handled or in any way in violation of the pure food and sanitary food laws. It provides that goods shall be properly marked with the date of receipt and withdrawal. It fixes the maximum period for storage of food at twelve months, and provides that the executive of the law may, under certain conditions, extend or limit this period. It furthermore provides for the labeling of all cold storage goods, so that the fact of such storage shall be known to the purchaser or consumer. Your committee believes the bill presented to be constitutional, and in its several provisions adequate to meet the demand for cold storage legislation.

H. E. BARNARD, Chairman.
M. E. JAFFA.
W. B. BARNEY.
M. E. PENNINGTON.

In a bill for the regulation of cold storage warehouses and the sale of cold storage foods which will be suitable for use in the several states, it has been necessary to leave blank all references to the agency designated for the enforcement of the act, the amount of the license fee and the method of its payment to the State, and the character of the fine to be imposed for violation of the act. While your committee feels that the State Board of Health should properly be entrusted with the enforcement of the law, it recognizes the fact that in many states the food control is vested in other departments, and that such departments are better equipped to enforce a cold storage law than the health board. The method of paying the license fee is also a matter fixed by statute in the several states. The method of penalizing offenders is not

essential to the uniformity of cold storage legislation, and should be drafted to meet the form and procedure now in vogue in the several states.

Wherever words or phrases are inserted in bracket it is understood that other words or phrases may be substituted therefor without invalidating the merits of the measure.

A Bill for an Act entitled, "An Act Relating to Cold Storage and Refrigerating Warehouses, the Sale or Disposition of the Food Kept or Preserved Therein, and Defining the Duties of (Food Commissioner), (State Board of Health) in Relation Thereto."

Be it enacted, etc., as follows:

Section 1. The term "cold storage" as used in this act shall be construed to mean the storage of food products at or below a temperature of 40 degrees Fahrenheit in cold storage or refrigerating warehouses.

The term "cold storage or refrigerating warehouse," as used in this act, shall be construed to mean an establishment employing refrigerating machinery or ice for the purpose of refrigeration, or a room or building otherwise artificially cooled, in which food products are stored for thirty days or more at a temperature of 40 degrees Fahrenheit or below.

The term "article of food," as used in this act, shall be interpreted to include fresh meat and fresh meat products, fresh fish, game, poultry, eggs, butter, milk, cream, and any other food products which may be specified from time to time by the (State Board of Health), under the authority hereinafter conferred.

Sec. 2. Any person, firm or corporation desiring to operate a cold storage or refrigerating warehouse, shall make application in writing to the (State Board of Health) for that purpose, stating the location of its plant or plants. On receipt of the application the (State Board of Health) shall cause an examination to be made into the sanitary condition of said plant or plants, and if found to be in a sanitary condition and otherwise properly equipped for the business of cold storage, the (State Board of Health) shall cause a license to be issued authorizing the applicant to operate a cold storage or refrigerating warehouse for and during the period of one year. The license shall be issued upon payment by the applicant of a license fee of (.....) dollars (\$.....) to the (treasurer of the state). In the event that any warehouse licensed under the provisions of this section shall be deemed by the (State Board of Health) to be conducted in an unsanitary manner, it shall be the duty of the said (State Board of Health) to revoke the license and to close the establishment until such time as it may be put in sanitary condition.

It shall be the duty of any person, firm or corporation licensed to operate a cold storage or refrigerating warehouse to keep an accurate record of the receipts and the withdrawals of the articles of food stored therein, and the (State Board of Health) shall have free access to these records at any time. Every such person, firm or corporation shall, furthermore, submit a quarterly report to the (State Board of Health), setting forth in itemized particular the quantity of food products held in cold storage. Such quarterly reports shall be filed on or before the 25th day of January, April, July and October of each year, and the reports so rendered shall show the conditions existing on the first day of the month in which the report is filed. The (State Board of Health) shall have the authority to require such reports to be made at more frequent intervals than the times herein specified, if in the judgment of the (State Board of Health) more frequent reports shall be needed in the interest of a proper enforcement of this act, or for other reasons affecting the public welfare.

Sec. 3. No article of food shall be placed in cold storage if diseased, tainted or deteriorated in any way, or if not slaughtered, handled and prepared for storage in accordance with the (pure food and sanitary food) laws and such rules and regulations as may be prescribed by the (State Board of Health) for the sanitary preparation of food products for cold storage, under the authority hereinafter conferred.

It shall be the duty of the (State Board of Health) to inspect and supervise all cold storage or refrigerating warehouses in this state and to inspect and supervise the entry of articles of food therein. The members of the said (State Board of Health) or (its) duly authorized agents, inspectors or employes, shall be permitted access to such establishments and all parts thereof at all times for the purposes of inspection and enforcement of the provisions of this act, or any other relating to food products. The said (State Board of Health) may also appoint and designate such person or persons as it deems qualified to make the inspections herein required.

Sec. 4. All articles of food when deposited in cold storage shall be marked plainly on the containers in which they are packed or on the individual article with the date of receipt, and when removed from cold storage shall be marked with the date of withdrawal, in accordance with such forms as may be prescribed by the (State Board of Health), under the authority hereinafter conferred.

Sec. 5. No article of food shall be held in cold storage for a longer period than twelve calendar months, except with the consent of the (State Board of Health) as hereinafter provided.

The (State Board of Health) may, upon application, grant permission to extend the period of storage beyond twelve months for a particular consignment of goods, if the goods in question are found, upon examination, to be in proper condition for further storage at the end of twelve months. The length of time for which further storage is allowed shall be specified in the order granting the permission. A report on each case in which such extension of storage may be permitted, including information relating to the reasons for the action of the (State Board of Health), the kind and amount of goods for which the storage period was extended, and the length of time for which the continuance was granted, shall be included in the annual report of the (State Board of Health).

The (State Board of Health) is hereby further empowered, after such investigation as (it) considers necessary, to determine whether or not a shorter limit than twelve months may be desirable in the case of any article of food, and to name a specified number of months less than twelve which shall thereafter be the time limit of storage for such article of food. Such action by the (State Board of Health) shall be taken only after a public hearing on such proposal of a shorter time limit than twelve months. Any limit shorter than twelve months which may be fixed by the (State Board of Health), in the exercise of the power herein conferred, shall go into effect thirty days after written notice has been sent to all licensed cold storage or refrigerating warehouse concerns informing them of the decision of the (State Board of Health).

Sec. 6. It shall be unlawful to sell, offer or expose for sale articles of food which have been held in cold storage without notifying persons purchasing, or intending to purchase, the same that they have been so held, and such notification shall be deemed to be given by the display on the receptacle or package containing cold storage goods of a card not smaller than six inches in length by six inches in width, upon which shall be printed the words, "Cold Stored," in plain Gothic letters not less than two inches in length.

Sec. 7. It shall be unlawful to return to cold storage any article of food that has once been released from such storage for the purpose of placing it on the market for sale to consumers, but nothing in this section shall be construed to prevent the transfer of goods from one cold storage or refrigerating warehouse to another, provided that such transfer is not made for the purpose of evading any provision of this act.

Sec. 8. The (State Board of Health) may make rules and regulations to secure a proper enforcement of the provisions of this act, including rules and regulations with respect to the sanitary preparation of articles of food for cold storage, the use of marks, tags or labels, and the display of signs, and the violation of such rules shall be punished on conviction, as provided in Section 9 of this act.

Sec. 9. Any person, firm or corporation violating any of the provisions of this act shall upon conviction be punished for the first offense by a fine not exceeding \$..... and for the second offense by a fine not exceeding \$..... or by imprisonment for not more than days, or by such fine and imprisonment.

Sec. 10. All acts and parts of acts conflicting with the provisions of this statute are hereby repealed.

Mr. Barnard: In explanation, I may say that we have used throughout this paper, the words "State Board of Health," but, as a matter of fact, the words "Food Commissioner," or any other executive title may be inserted in any way injuring the coherence of the bill.

Mr. President, this bill contains nine paragraphs or sections. The committee believes the bill as it stands is adequate. I believe, however, that many members of the Association may take exception to certain provisions of certain sections, and I am in doubt as to whether or not I ought to present the bill in full at this time, taking up the time of the Association, and then having to go over it afterwards, section by section, and it occurs to me that it will be a proper method of procedure to interrupt the Chairman in his presentation whenever a question occurs which ought to be discussed.

The President: I think there will be no objection to that.

Mr. Flanders: Do I understand, that according to the provisions of this bill, it does not apply in places where the temperature is 40 degrees or above?

Mr. Barnard: It does not apply where the temperature is 40 degrees or above. I will read that paragraph again: "The term 'cold storage or refrigerating warehouse' as used in this act, shall be construed to mean an establishment employing refrigerating machinery or ice for the purpose of refrigeration, or a room or building otherwise artificially cooled, in which food products are stored for 30 days or more at a temperature of 40 degrees Fahrenheit, or below."

"The term 'article of food,' as used in this act, shall be interpreted to include fresh meat, and fresh meat products, fresh fish, game, poultry, eggs, butter, milk, cream, and any other food products which may be specified from time to time, by the State Board of Health, under the authority hereby conferred."

Mr. Cutler: Do I understand that that refers to a regulative authority of your Board of Health, or some other authority? Do I understand that that refers to a regulative authority which the Board of Health or some other authority may have?

Mr. Barnard: Under the authority which will be given by this act.

Mr. Crumbine: This seems to exclude preserved meats of any kind.

Mr. Barnard: They don't go into cold storage in quantities for the purpose of being preserved.

Dr. Crumbine: The word "fresh" is used seemingly to exclude preserved foods?

Mr. Barnard: Yes. Hams, for instance, would not go into cold storage for the purpose of being preserved. They can be preserved outside.

Dr. Crumbine: Would it not be better to say "food products" and not say "fresh meat products?"

Mr. Barnard: We don't want to include certain foods, such as cheese and fruits. We don't want to include all food products.

Mr. Flanders: I want to get my bearings a little. I would like to hear a brief statement from the chairman of this committee as to the objects to be accomplished by this statute. That is what I means is: First, will it prevent deterioration of products; second, will it prevent deception; and, third, prevent cornering the market? I would like to have the chairman give a general outline as to the purpose of this statute. I don't care to discuss this question just now, but I simply want to hear a statement from the chairman as to that point.

Mr. Judd of Oregon: Mr. President, I see that we have a lot of work cut out for us, and I want to offer this as a suggestion: That the chairman of the committee just read this bill now, and let us have it then to think over, and set some future date on which we will take it up, section by section, after we have considered it and digested it.

The President: Do you make a motion to that effect?

Mr. Judd of Oregon: I move that the Chairman of the Committee on Cold Storage read this bill through at this time, and that a future date be set at which it will be discussed section by section.

The President: Do you wish to set it for a future date, or simply receive the report now, and discuss it later?

Mr. Judd: Well, we will surely want to discuss it later. I will make two motions: The first is that the chairman merely read this bill to us now. After that passes, if it does carry, I will move, or would rather that some other gentleman would move, that some certain date—I would suggest some night would be better put in to cover this question, than going to a moving picture show.

Mr. Jones of Illinois: I would like to amend that motion, by moving that we have copies of this bill printed, so that everyone may have a copy of it. We have been trying to get this through our legislature for some time. It is an important matter, and I would like to have copies of it typewritten, so that each member can have a copy of it.

Mr. Judd: I accept that amendment.

The motion, as amended, was duly seconded.

The President: It has been moved and seconded that the chairman of the committee read this bill, and that the bill be put into print for distribution at this meeting. Are you ready for the question? All in favor will signify by saying "Aye." The opposed the same. The motion is carried.

Mr. Barnard: The Committee on Cold Storage presents this report, and, for the committee, I move its adoption.

The President: Gentlemen, you have heard the report of the committee. What is your pleasure?

Mr. Cutler: Mr. President and gentlemen, under the resolution offered, I think we were to leave it open for discussion before any action is taken.

The President: The purpose of the Chair in asking that question was to ascertain whether or not it was the desire of the meeting to set any specific date for the purpose of discussing this matter.

Mr. Allen of Kentucky: If it is in order, Mr. Chairman, I move that the Executive Committee fix the hour and the day for the consideration of the bill.

Mr. Flanders: I second the motion.

The President: You have heard the motion. Are you ready for the question? All in favor say "Aye." The opposed "no." The motion is carried. The Executive Committee accordingly, will determine the date of the discussion of this important matter.

The Secretary: The chairman of this committee states that he has seven or eight copies of this bill. If that would be enough, without putting the Association to the expense of having more copies made, it would be desirable. If that would not be enough, of course, we can have more copies made.

Mr. Bailey: I think a matter of as great importance as this bill should be in the hands of every delegate here. That is, a copy of this bill should be in the hands of every person here, so that he may consider it intelligently, and be in a position to make any suggestion that he desires to make, after having an opportunity to examine the bill in detail. The matter has been up before time and again, and we don't want to pass it lightly, for the purpose of saving six bits.

The President: The resolution stands then.

The next order of business is the report of the Committee on Bacteriological Methods. I would like to ask if the chairman of that committee is here.

Dr. Crumline: I have received a letter from Dr. Billings, enclosing his very brief report, and as no other members of this committee appear to be here, I will read this report. No, I see that Dr. Healy is here, and I will pass the report to him to be read.

Dr. Healy of Kentucky: The report of the Committee on Bacteriological Methods is as follows:

REPORT OF THE COMMITTEE OF BACTERIOLOGICAL METHODS.

Mr. President and Members of the Association of State and National Food and Dairy Departments:

Gentlemen: Your committee that was provided for at the last meeting of the Association, and that has been duly appointed, is able, at this date to give only a report of progress. Preliminary correspondence between the chairman and the other members of the committee has resulted in a tentative list of foods that has been taken under advisement for laboratory experiment. The items of the list are milk, cream, ice cream, evaporated milk, water, catsup, jam, oysters and carbonated drinks.

It is expected that by the time the Association meets again, some of the items given will have been considered by the committee and respective standard methods of bacteriological analysis determined.

(Signed) F. H. BILLINGS,

Dated, Boston, July 1, 1912

For the Committee.

The committee consists of: Dr. J. S. Abbott, Austin, Texas; Dr. J. H. Wright, Fargo, North Dakota; Dr. D. H. Healy, Lexington, Kentucky; Dr. G. W. Stiles, Washington, D. C.; Dr. F. H. Billings, Chairman, Lawrence, Kansas.

The President: Gentlemen, you have heard the report of the Committee on Bacteriological Methods. There being no objection, it will be received. Do I hear a motion for adoption?

Mr. Flanders: I move that the report be adopted, and that the committee be continued.

The motion was duly seconded.

The President: The Chair would like to state that he found a great deal of difficulty, as, possibly, you all know, in getting enough bacteriologists in food and drug work to fill this committee, and this motion, therefore, seems to be eminently appropriate, inasmuch you already have a committee that has already started the work, and the best you can do is to continue the committee. All in favor of the motion that the report of the Committee on Bacteriological Methods be adopted and for the continuance of the committee signify by saying "Aye." All opposed "No." The motion is carried.

The Secretary desires to make a statement, and then the Chair will announce the appointment of the special committees.

The Secretary: The Association of State Food and Dairy Executives designated as Section A in the program, will meet in this room this afternoon at 2 o'clock. Section C, the food analysts, in a room on the floor above this, this afternoon at 2 o'clock.

I am requested to state also that the price of the lunch will be thirty-five cents each.

The President: The Chair begs to announce the following Special Committees:

On Credentials: The Secretary, Dr. S. C. Dinsmore, and Hon. J. Q. Emery.

On Resolutions: Dr. H. E. Barnard, and Mr. J. G. Winkjer. I beg to say that the Resolutions Committee as composed under the present organization, consists of the chairman of the separate sections, and two appointees by the Chair.

The Auditing Committee, as provided by the new Constitution, consists of Dr. E. F. Ladd, Hon. A. H. Jones, and Hon. H. F. Potter.

Is there any further business before the Association?

Mr. Caspari, Jr., of Maryland: Mr. President, I was, just a few moments ago, handed a letter by Mr. Davies, which I desire to read at this moment. It comes from the general secretary of the American Pharmaceutical Association:

"Please convey to the Association of State and National Food and Dairy Departments assurances of the good will and esteem of the American Pharmaceutical Association.

"Our Association is, I believe, the oldest organization on the American continent, formed to promote the enactment and enforcement of food and drug laws. Its initial meeting in 1851 was called for the purpose of advocating more perfect enforcement of the Federal law regulating the importation of drugs, and the proceedings of this first meeting were devoted entirely to the consideration of this subject. From that time forward the Association has stood squarely and without faltering upon its first platform.

"Its members and committees helped to formulate and worked to procure the enactment of the present Federal food and drugs act, and they have been equally active in promoting similar legislation in the various states.

"Very many food and drug officials, both State and Federal, are members of our association, and we trust that eventually all of them will be found upon our membership roll.

"We trust that the meeting at Seattle may be fruitful in good results, and that we shall have the pleasure of meeting many of the members of the Association of State and National Food and Dairy Departments at our sixtieth annual convention, which meets at Denver, Colorado, August 19.

"Sincerely yours,

"(Signed) J. H. BEAL,
"General Secretary."

I think it is quite appropriate that this communication, coming from the general secretary of so large and influential an organization, which has taken such an active part in the matter of the National Food Laws, should be presented at this session.

The President: If there is no objection, the letter will be received, and the Chair would suggest that a return message would probably be in order.

Mr. Jones: I don't know whether there should be an adoption of this letter or not. Is that to be adopted?

The President: There is no adoption necessary. The communication is received, and is given to the Secretary.

Mr. Jones: I just want to say that that Association has never helped us in Illinois. If there is anything that is abominable to us in Illinois, it is this drug law that was carried out by this Pharmaceutical Association.

Mr. Emery of Wisconsin: Mr. President, I raised the question this morning with reference to the adoption of this new constitution, and now it comes to us that a committee is already appointed by the President, assuming that this constitution has been adopted; I don't believe it is a wise policy that the Committee on Resolutions should be chosen in its majority from separate parts of the Association instead of by the entire organization, and later on, in due time, I propose to offer an amendment against such proposed change in the constitution.

Mr. Foust of Pennsylvania: I offer this resolution:

"Whereas, The most numerous instances of food adulteration have resulted from the substitution by food manufacturers of ingredients other than such as have found established acceptance in domestic food preparation,

"Resolved, That it is the judgment of the Association of State and National Food and Dairy Departments that persons manufacturing foods for general consumption should employ as ingredients therein no materials other than those commonly

used in the domestic preparation of the respective foods, and especially that the use of chemical preservatives and of substances having no food value should be avoided.

"Respectfully submitted,

"JAMES FOUST."

The President: The Chair is of the recollection that under the new constitution, which we are working under temporarily, all resolutions must go to the Committee on Resolutions, without debate.

Mr. Emery of Wisconsin: For the purpose of being understood in the future, I wish to say that reference of this resolution also embraces acceptance of the new constitution, to which I purpose offering an amendment. I do not believe that a body of intelligent men, assembled from all over this country, for, among other things, educational purposes, should deliberately adopt an almost unheard of practice of providing in its constitution, instead of its by-laws, that a member of the Association cannot rise upon the floor and offer a resolution, and have this body of men deliberate upon, consider and dispose of that resolution. It seems to me that the Committee on Resolutions seems to make a machine, whereby the individual members of this Association cannot give expression to their intelligent judgment.

The President: The Chair is of the opinion that, possibly, it should be distinctly understood at this time, that such work as we do, we still consider in toto, and in essence the new constitution before completing our labors, and sufficient space of time before completing our labors, to give unity to our whole proceedings. The Chair is of the opinion that under the resolution adopted this morning, discussion of the new constitution is out of order at this time, and would so rule, but the Chair wishes to be distinctly understood as being of opinion that such action as is taken at this time is tentative, and that we are working now toward final action only, so that we may have an experimental, if you choose to call it so, or a temporary working basis. If the Chair is wrong, he would like to be corrected, and if any member has any suggestion to make along that line, the Chair would be glad to hear from him.

Mr. Foust of Pennsylvania: It seems to me that if the proposed bill for the adoption of this new constitution will consume a considerable amount of time, it might be a good idea, instead of making the adoption of the new constitution the first order of business for Thursday morning, to have a night session and fix the time for the night session as Thursday night. We may be here from 8 o'clock until midnight. I am of the opinion that the matter will take four hours to dispose of it, and if we undertake to do it at one of the regular sessions, it is going to interfere with our business.

The President: The Chair is distinctly of the opinion that a night session will be necessary. The Chair will state that arrangements have been made for a night session down town, or they can be made.

Mr. Davies of Washington: I think we can arrange for a meeting down town later. If not, we can meet here. We can meet here at any time, on any night.

The President: The only suggestion the Chair would have to make in that connection would be—and the Chair desires right here to say that he does not wish to be the whole house; he may be taking up more time than his share of the debate—the only suggestion that the Chair would make would be that action as soon as possible on these important matters is desirable.

Mr. Barnard of Indiana: Mr. President, I move to reconsider the motion adopted some time ago, providing that the matter of the adoption of a new constitution be made the first order of business on Thursday afternoon.

Mr. Flanders: I second the motion.

The President: It has been moved and seconded that we reconsider the motion just passed for making the new constitution the first order of business on Thursday. Are you ready for the question? All in favor of the motion as made will please say "Aye." All opposed "No." The motion is carried.

Mr. Foust: I move that we fix tomorrow night at 8 o'clock as the time for acting on the proposed cold storage bill, and on the proposed new constitution.

The President: May I make the suggestion that you put the motion with the new constitution first?

Mr. Foust: Yes. I move that we fix tomorrow night at 8 o'clock for acting on the proposed constitution and the proposed cold storage bill, the place of meeting to be announced later.

The President: To be announced, let us say, at the close of tomorrow morning's session?

Mr. Foust: Yes; at the close of tomorrow morning's session.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion. Are you ready for the question? All in favor say "Aye." All opposed "No." The "Ayes" have it. The question of the adoption of a new constitution and consideration of the proposed cold storage bill will be set for tomorrow evening at 8 o'clock, the place of meeting to be announced at the close of the session tomorrow morning.

Dr. Crumbine: Mr. President, in order that we may not appear discourteous to the American Pharmaceutical Association, and no discourtesy was intended, I am sure, I move that the Secretary of this Association be instructed to send the greetings of this Association to the Secretary of the American Pharmaceutical Association, acknowledging receipt of his letter, and thanking them for their interest and good wishes.

Mr. Barnard: I most cordially second that motion.

The President: That is a most appropriate action. The American Pharmaceutical Association is composed of some of the greatest men of science of this country. All in favor of this motion say "Aye." The opposed "No." The motion is carried, and the Secretary is so instructed.

Is there any further business before the meeting?

Mr. Hansen of Utah: I move that we adjourn for lunch.

The motion was duly seconded.

Mr. Davies of Washington: Mr. President, and Gentlemen of the Association, I wish to say that the arrangement announced for taking lunch at the dormitory was made so that it might not interfere with the members going on with the meeting, which would probably be the result, if you were required to go down town for lunch, as there would not be time to go down town to get lunch and return here in time for the opening of the afternoon session. Dr. Johnson will take us to the place where we are to have our lunch. I wish to say further that some entertainment has been provided for the members of the convention by the Chamber of Commerce, and so forth, but it has been so arranged that it will not interfere with the business sessions. I will say that there is nothing prepared for today, but there will be an announcement tomorrow morning.

The President: You have heard the motion to adjourn until 2 o'clock. All in favor, signify my saying "Aye." Those opposed "No." The motion is carried, and a recess will be taken until 2 o'clock this afternoon.

(Whereupon at 12:50 o'clock p. m., the meeting was adjourned until 2 o'clock p. m.)

WEDNESDAY, JULY 10, 1912.

Morning Session, 10 O'clock.

The President: Gentlemen, the Association will please be in order.

The Chair desires to announce that Governor Hay of the state of Washington was unexpectedly detained yesterday, and was unable to be present here, but we have asked him to come here and say a few words to us this morning about his state. I have the pleasure of introducing Governor Hay. (Applause.)

ADDRESS OF WELCOME ON BEHALF OF THE STATE

By Governor M. H. Hay.

Mr. President and Gentlemen of the Convention:

I am certainly very much pleased to have this opportunity to welcome you here, both for myself and on behalf of the people of the state of Washington. We feel that we are greatly honored, by your having selected our state and the city of Seattle as the place for holding this convention.

I wish to apologize to you for not being here with you yesterday. I will say, in explanation of my absence, that there does come a time in the life of every man when he must attend to business first and pleasure afterwards, and this, being campaign year, it stands a man in hand to attend to business first. I was very sorry that I was unable to be present yesterday, but we simply had work on our hands yesterday that we could not dispose of.

Not being so familiar with the history of your work and of your organization and of the details of your past achievements, as I thought I should be in addressing this organization, I sent down to our librarian yesterday to have him send me any records or data that he had on the subject of the work done by this Association, giving a history of its achievements, its purposes and its growth. The librarian sent work back to me that he didn't have anything of that

kind in the library, so I will not be able to go into details and dwell upon your expansion and growth as it is customary to do in an address of this kind. But I take it that your organization is the outgrowth and result of the present economic conditions. It has been brought about by a demand for food inspection.

At the time of the adoption of the constitution of this country, and largely so down to the civil war, a very large proportion of our people lived on the farms. They sold but little and bought less. The farmer raised his own grains, took it to the local miller where it was ground out on toll, he taking his share for grinding the grain, and the farmer taking what was left, if there was any left. From the smiles that I see on the faces of some of those before me I see that there are some who have had experience in the days of taking your grist to the mill and dividing the flour with the miller. The farmer raised his own meat, beef, mutton, pork, butter and eggs and there was not much call for an inspection of food at that time.

However, nowadays, conditions have changed. We have no idea of the man who raised our grains or ground our



HON. M. H. HAY,
Governor of Washington.

flour. We have little idea who our butcher is or who furnishes us with our butter and eggs and milk, and the man who has the product to sell does not know who is going to consume it. This is a commercial age; naturally the man who has the product to sell wants to get as much for it as he possibly can. And there are people in this world who will adulterate food stuffs, as well as other things, for the sake of profit. And to protect the public against these people who are so unscrupulous as to adulterate foods, drugs and so forth, they have had to establish pure food laws and create offices to which men are appointed whose duty it is to see that those laws are carried out. That is, I conceive the object of the creation of your departments and of your work today. It is a great work that you have in hand. It is something that has come to stay, as far as we can see, at least. Economic conditions guarantee that we must keep departments of this kind, just as we have departments which have control over other matters, such as the regulation of corporations. A few years ago we had no regulation of cor-

porations. Many of the states have commissions that have control over the public service corporations, and there are officials who have in charge the matter of the enforcement of our laws as to the protection of men from dangerous machinery, and all these things are in line with the growth and development brought about by the economic conditions existing in our country in the last few years.

I am more than pleased to see so many of you out here. I realize it is a long ways from the eastern states, from which many of you have come. I will probably have to apologize a little for our weather, as it is a little rough. We can't very well enjoy the juleps under the shade of the trees, but we like it out here, and we sincerely trust that you will be able to put up with it for a short time, and I hope that we will have the pleasure of having you with us again.

As I said before, we are a long ways from the center of population, but you will have to come out to see us. We have been going east now for a good many years, and it is no farther for you to come here from the eastern states than it is for us to go from the Pacific coast to the eastern states.

If you will kindly excuse me now, because I have some matters of business to attend to, as well as pleasure, I will welcome you again, on behalf of the state of Washington, and hope you will see us again. (Applause.)

The President: Gentlemen, I feel sure that it is the sentiment of all that it is unnecessary for Governor Hay to apologize to this body, because we all know of the demands that must be made upon him. I might say that we know of such a thing as politics ourselves. Of course, I don't say that we indulge in any such thing, but I might say that we know of politics. I wish that we might have Governor Hay give us a few minutes of his time, so that the members of this organization may have an opportunity to meet him and know him, and so that he may meet the members of this Association, who are engaged in this work, so that he may see that we are not always men of serious mien. We will take an intermission of a few minutes for the purpose of giving the members an opportunity to meet Governor Hay in social session.

(Whereupon a recess was taken for the purpose of permitting the members present to meet Governor Hay.)

The President: Gentlemen, let us be in order again. Mr. Davies has an announcement or two which he desires to make.

Mr. Davies of Washington: Mr. President and Gentlemen of the Convention: I desire to state that this afternoon at four o'clock there will be automobiles enough here in front of the building to take the members and visitors and their ladies out for a ride around the boulevards and around Lake Washington for a few hours. The automobiles will be here for you at four o'clock this afternoon. This afternoon there will be somebody here, Mrs. Davies, probably, to take the ladies around the campus, if they desire to go. Tomorrow afternoon the ladies of the party will be entertained at the theater and further arrangements about that will be made at the hotel. Arrangements have been made for an all day boat ride, to go to the largest salmon cannery in the world. Commissioner Bailey may not agree with me in that statement, but this cannery is said to be the largest salmon cannery in the world, and this visit will give you an opportunity to see it in operation. It will require a five hour ride on the boat to get to the cannery, and, of course, five hours to get back. The boat will leave the dock at nine o'clock. The date for making the trip is up to the convention to decide. They can go any time they desire, and I have told the Chamber of Commerce that possibly we might go on Friday and hold the business sessions of that day on board the boat, but that is a matter that is up to the convention. The only thing that the Chamber of Commerce desires to know is the date that the members of the Association wish to make the trip. (Applause.)

The President: Gentlemen, you have heard Mr. Davies' request regarding the boat ride, and the matter of the decision thereupon. It seems to me that it is up to us to make a decision at this time. The Chair, I believe, has been on only boat ride, at which it was proposed to hold a meeting, which was at the Mackinac meeting in 1908. If I remember that occasion correctly, it was not a very satisfactory way of holding a business meeting. Of course, we have a very busy meeting, with a great deal of business to go through, and the matter is now open to discussion.

Mr. Wallis of Idaho: Mr. President, I move that the convention accept this kind invitation to take the boat ride and that we go on Friday.

The motion was duly seconded.

The President: The motion has been made and seconded

that we go on the boat ride on Friday. Discussion is in order.

Mr. Davies of Washington: There is one other matter that I forgot to mention: Arrangements have been made so that the convention may hold their meeting down town tonight, if it is desired, and we can have a room down town for the purpose of holding the meeting tomorrow night also, or the meeting can be held here tomorrow night.

Mr. Flanders of New York: Mr. President and Gentlemen: I would like to say a few words regarding the matter of the visit to the salmon cannery. I came across the continent about 3,000 miles to attend this meeting, and I have got 3,000 miles to ride back and we are here assembled in this convention for a period of four days. So far as I am personally concerned, it would suit me better if you gentlemen who want to take the boat ride would take it on Saturday. I don't know how the others may feel about this matter, but that is my idea. I am merely expressing that as my own personal view of the subject.

Mr. Davies of Washington: I would like to say that it is immaterial to the Chamber of Commerce what date should be selected, only they would like to know what date is selected immediately. I took the liberty of making the suggestion, that it might be Friday, believing that possibly the business scheduled for Friday might be disposed of on board the boat.

Mr. Bailey: I would like to make the suggestion that these gentlemen who have come so far to attend this convention ought not to go back across the continent without seeing as much of the country surrounding as possible, especially the canneries and lumber mills and the other industries here on Puget Sound. For my part, I would suggest that it should not be put off too long. I would say, by all means, not to put it off longer than Friday.

Mr. Wallis of Idaho: I know, for a fact, that some members of this organization have made their reservations to leave on Friday night, and that was one of the reasons, or, in fact, that was the only reason I made the motion to go on Friday.

Mr. Flanders of New York: If we could finish the program before this trip is made, then, that would relieve the objection that I raised as far as I personally am concerned.

Mr. James Foust of Pennsylvania: I wish to endorse everything that Commissioner Flanders has said. We are spending quite a lot of money to travel across the continent to attend this meeting of the Association, and we have prepared a very full program, composed of important matters here and the question is: What is our duty? What should we do first? All of those who have made their reservations to leave Friday evening and who desire to take this boat ride surely can get their reservations changed and go on this trip Saturday instead of Friday. If we can continue in session tonight and tomorrow and tomorrow night and complete our program in that way, then I will be heartily in accord with the motion of Mr. Wallis, but if it is a question of taking this ride or giving up the program, I am in favor of sticking to the program.

Mr. J. Q. Emery of Wisconsin: I want to endorse the remarks of Commissioner Flanders and Commissioner Foust in regard to this matter. I came here from the state of Wisconsin to attend this meeting and I desire to attend first to the business of the convention. If we can clean up Friday's program today and tomorrow, then I think it would be in order to accept the invitation to take this boat ride, but it seems to me that it is our duty first to clear up the program before we accept this invitation.

Mr. Davies of Washington: Mr. President and Gentlemen: In planning what little entertainment we have planned for the visitors and delegates here we have tried to plan it so as not to interfere with the work of the convention, and I don't want the convention to understand that I am favoring this trip on Friday, if it will interfere with the work of the convention. My idea in suggesting that the Association might decide to make the trip on Friday was caused by the fact that I thought if we worked tomorrow night and tonight we would be able to dispose of the business, except the business that might be disposed of on the boat. I want to say further that at the Duluth convention some of the members said that they wanted to see a cannery for educational purposes, and that is what prompted me in making the suggestion for this trip.

The President: I want to say that I am heartily in accord with what Mr. Davies has said about the matter of entertainment. Mr. Davies has consulted with me about the matter of entertainment, and I know that he has endeavored to plan the entertainment so as not to interfere with the business sessions of the convention. Is there any further discussion?

Mr. Emery of Wisconsin: Mr. President, I hardly know

how to vote on this motion, in view of the fact that I do not know what efforts will be made to dispose of the business on the program by holding evening sessions.

Mr. Foust: I would like to propose an amendment to Mr. Wallis' motion, that we continue in session tomorrow night until we complete the program.

The President: Does Mr. Wallis accept the amendment? The Chair would suggest that you are laying out a rather large order of business for yourselves. You have a program, not only of your general meeting for Thursday and Friday, but you have four distinct sections, and you have got that program filled up for the entire remaining three days.

Mr. Wallis of Idaho: I do not believe I will accept the amendment of Commissioner Foust. I insist upon the motion made, that we take this boat ride on Friday.

The Secretary: Mr. President, if we should fail to complete the program by Thursday night, could we not do it Friday night?

Mr. Foust of Pennsylvania: Mr. President, there is quite a number of the commissioners who have made their reservations, and their plans have been laid to leave Friday night. I don't see how that could be very well arranged.

Mr. Winkjer of Minnesota: Mr. President, by pushing this program through as fast as we can, as suggested, we may get to a point on Thursday night, where we will have only a little business left, and might it not be possible, on account of the accommodations on the boat, that we could finish the rest of the program on the boat on Friday morning? It seems to me that a visit to a cannery of that kind would be of great importance to the commissioners.

Mr. Willard Hansen of Utah: Mr. President, I agree with Mr. Winkjer. I don't see why we can't get together on that boat and hold our business session in the morning, going up on the boat.

The President: All in favor of Mr. Wallis' motion, will, when the vote is taken, signify by saying "Aye." All against this motion will please say "No." The motion is carried, and the trip, therefore, will be taken on Friday.

Is there any further business which is to come before the body at this moment, before we take up the regular program. If not, we will proceed with the regular program. The first thing on the program is the report of special committees. If there is no report of special committees, the report will be passed, and the report of the Secretary, which includes the report of the Executive Committee, will be read.

REPORT OF EXECUTIVE COMMITTEE AND SECRETARY FOR 1912.

On August 22, during the meeting at Duluth, the Executive Committee, all members of same being present, authorized Dr. S. J. Crumbine to have 500 copies of the report of the Committee on Coöperation printed in pamphlet form for distribution at the meeting. Dr. Crumbine had the report printed and distributed. About 150 or 200 copies were left over. On request many of these have been distributed since. About fifty copies still remain in the office of the Secretary and can be had on application.

Immediately after the adjournment of the meeting of the Association at Duluth on August 24, a meeting of the Executive Committee was called by the President, with the following members present: Dr. Lucius P. Brown, Chairman; Dr. Charles D. Wood; Dr. E. DeBarr; Dr. W. M. Allen, Secretary. The Committee instructed the Secretary, provided he could, to make a similar contract with H. B. Meyers & Co., publishers, for publishing the proceedings of the Duluth meeting of the Association as was carried out the previous year. The Secretary made the contract, which provided for the publishing of 200 copies of the proceedings in pamphlet form, according to specifications, the cost of same to be as low as possible and not to exceed \$200, the amount paid for publishing proceedings of the previous meeting. The volume of material proved to be less than that of the previous year and the bill was \$150.

The committee requested and authorized Dr. DeBarr, a member of the committee, to edit the proceedings before the same were sent to the publishers and to read proof of the same. The reporter was therefore instructed by the Secretary to send report as soon as copied to Dr. DeBarr. Dr. DeBarr edited report and forwarded same to the publishers.

In this connection it is but fair to those concerned, to say that the reporter who was employed for the committee by the Secretary, was unable to make from his notes a complete report of the proceedings. Being unable to comply with his part of the contract, the reporter offered to accept \$150 for the two copies of the proceedings, when the contract price was \$250.

That we did not succeed in getting a complete report of the

proceedings is greatly regretted by your Secretary, who engaged the reporter.

The other members of the committee desire to thank Dr. DeBarr for editing the proceedings and getting same in shape for the publishers.

The committee instructed the Secretary to send two copies of the proceedings to the officials of each state holding membership in the Association, and to the officials of the United States Department of Agriculture and the District of Columbia. The Secretary carried out the instructions of the committee. The committee also authorized the Secretary to offer the remaining copies for sale at one dollar per copy. Very few copies have been sold and there remain in the hands of the Secretary about 100 copies each of the 1910 and 1911 reports. A little advertising might have brought demand for them.

Resolutions Nos. 9 and 10, referring to legislation by Congress affecting the sale of food and drug products, were sent to the President of the United States and to the chairman of the committees having the legislation in charge in both houses of Congress.

The committee authorized the President to prepare the program for the annual meeting, the same to be submitted to the other members of the committee for approval. The President, aided by the officers of the sections, under the revised constitution, prepared the program, which was approved by the committee and sent to the members of the Association by the Secretary.

In making up the program the President considered the placing on the same, by request to be heard, the names of persons not eligible to membership in the Association. The matter was referred to the committee and, on account of past experiences, the committee thought, except in rare and extraordinary cases that it would be unwise to place the names of such persons on the program.

At the last annual meeting the following states were represented: Alabama, Connecticut, Florida, Georgia, Idaho, Illinois, Iowa, Indiana, Kansas, Kentucky, Louisiana, Maine, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, United States Department of Agriculture, Utah, Virginia, Washington, Wisconsin and Wyoming.

Article II of the old by-laws was amended to read as follows: "In voting by ballot or otherwise each state shall be entitled to three votes, provided the annual dues have been paid."

This has been construed to mean dues for the previous year and not the year in which the meeting is held, for the dues of that year have not been regarded as due until the meeting. Some states have followed the practice of paying their dues at the annual meeting at which they become due, while others have waited and paid them along during the year, even as late as the following annual meeting.

The revised constitution provides as follows: Article II, Section 1. "No State or Department more than one year in arrears of the dues fixed by the Association shall be entitled to vote."

The following states or departments have paid their dues up to 1912: Alabama, California, Colorado (half dues, Food and Drug Department paid; Dairy Department half of dues not paid), Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Missouri, Nebraska, Nevada, New York, North Carolina, South Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, U. S. Department of Agriculture, Utah, Virginia, Washington, Wisconsin and Wyoming.

The following states or departments have not paid their dues for 1911: District of Columbia, Georgia, Michigan, New Hampshire, New Jersey.

The roll as at present constituted consists of thirty-seven voting members, provided, of course, that the few in arrears for 1911 pay their dues for that year.

Sixteen states or departments have paid their dues and \$4.00 have been collected for copies of the proceedings since the Secretary last reported to the Treasurer on June 2d. These funds are still in the hands of the Secretary.

At the direction of the Executive Committee the Secretary, through Commissioner Davies, engaged reporters to take the proceedings of the present meeting.

Respectfully submitted,

W. M. ALLEN, Secretary.

The President: Gentlemen, you have heard the report of the Secretary, which included the report of the Executive

Committee. Without objection, it will be received. There being no objection, we will pass to the report of the Treasurer.

REPORT OF TREASURER.

SEATTLE, WASHINGTON, July 9, 1912.

To the Officers and Members of the Association of State and National Food and Dairy Departments.

Gentlemen: I beg to submit the following report as Treasurer of the Association of State and National Food and Dairy Departments, from Aug. 21, 1911, to July 9, 1912:

RECEIPTS.

Balance on hand Aug. 21, 1911.....	\$223.17
Dues, 1910—	
Alabama	10.00
Colorado	5.00
Florida	10.00
Georgia	10.00
New York.....	10.00
Idaho	10.00
Indiana	10.00
Iowa	10.00
New Hampshire.....	10.00
Dues, 1911—	
Alabama	10.00
Colorado	5.00
Maine	10.00
Minnesota	10.00
Pennsylvania	10.00
South Dakota.....	10.00
Virginia	10.00
Idaho	10.00
North Carolina.....	10.00
Louisiana	10.00
Missouri	10.00
Utah	10.00
Oregon	10.00
Nebraska	10.00
Nevada	10.00
For copies of Proceedings.....	4.00
Total Receipts.....	\$457.17

EXPENDITURES.

Joseph H. Wallis, Boise, Idaho, typing resolutions of Association at Duluth meeting	\$ 2.05
Consolidated Stamp & Printing Company, Duluth, Minn., printing 500 copies of report of Committee on Coöperation	25.00
Edward Hagen, reporting proceedings of Duluth meeting of Association of State and National Food and Dairy Departments.....	75.00
W. M. Allen, Secretary, Raleigh, N. C.—	
Express on 200 copies of printed report of Committee on Coöperation, from Duluth, Minn., to Raleigh, N. C.....	\$ 1.15
Express on 200 copies printed report of the Duluth meeting of the Association from Chicago, Ill., to Raleigh, N. C.....	5.25
Postage for sending Proceedings to members and others.....	6.00
	12.40
E. M. Uzzell & Co., Raleigh, N. C.—	
200 letter circulars.....	2.50
200 catalogue envelopes, 6½x9½.....	.50
400 programs, 15th Annual Convention.....	5.50
200 circulars	2.00
2 receipt books, 100 each.....	2.00
1,800 letter heads, unruled; 200 letter heads, ruled; pack of 100.....	12.50
1,000 envelopes, Imperial Bond.....	3.50
Express on letter heads and envelopes....	1.78
200 circular letters.....	2.00
	32.28
H. B. Meyers & Co., Chicago, Ill., printing Proceedings of 15th Annual Convention of the Association of State and National Food and Dairy Departments, Duluth, Minn., Aug. 21-24, 1911.....	150.00
H. M. Ives & Sons, printers—	
1,000 letter heads.....	\$4.80
500 envelopes	2.10
	6.90
Total expenditures.....	\$304.08

RECAPITULATION.

Total receipts.....\$457.17
Total expenditures.....304.08

Balance on hand.....\$153.09

Respectfully submitted,

JAMES FOUST,
Treasurer.

The President: You have heard the report of the Treasurer. Without objection, it will be received. Do you desire to take any further action about it? If not, we will pass to the next order of business.

The Secretary: I desire to say that the amount I have received since I have been here, and since the time of leaving home, and after I reported to the Treasurer, is \$164, which is in the hands of the Secretary at present.

The President: The first paper upon the program is "The Object of the Association as Defined by the New Constitution," by Hon. A. H. Jones of Illinois.

Mr. Jones of Illinois: Mr. President, and Gentlemen: In preparing this paper, I had expected to have Dr. Woods, who was chairman of this committee, and upon whom devolved the work of compiling and arranging the same, here, but, unfortunately, Dr. Woods is not present. I had expected to go over this matter with him, and see if there were any corrections, or anything of that kind, to be made, but we have not been able to have a meeting since this paper has been prepared. I make this statement for the reason that there are many things here in this matter, as I understand it, that embody the ideas of the committee, and I have prepared it a good deal like a lawyer would prepare a brief, along the lines that I understood the committee would want it, and as the convention might desire to have it prepared. My own private feelings do not enter into this. The old plan was perfectly satisfactory to me, of carrying on the work of the convention, and having it all in one body, and under one head, but, it seems, that at the convention, I believe, held at New Orleans, it was desired otherwise, and this committee was appointed, and being a loyal member of the Association, along that line, and the other members of the committee feeling the same, we went ahead and prepared this paper. As will be remembered by the members of the Association, at the meeting of the Association at Duluth, the work of sections, as embodied in the constitution in the copies furnished you, was submitted and tentatively adopted there, and then the work of the committee was continued until this annual meeting, in order that we might meet with the National Stock Food Association, or the members who have charge of the enforcement of the stock food laws, and see if they did not want to come in to our organization, and become a section and coöperate with us; and they were seen, and they decided that they did not desire to come in. They had their own association, and they didn't care to affiliate with us. This is substantially the constitution that was submitted and tentatively adopted, and under which the convention is at work at this time, and for that reason, as I say, I have prepared the paper along that line. Dr. Woods was to be here to discuss it, and I had hoped that before I read the paper I could discuss it with Dr. Woods, and other members of the committee. If there are any imperfections along the line of the work, you will understand it is for that reason.

THE OBJECT OF THE ASSOCIATION AS DEFINED BY THE NEW CONSTITUTION.

By A. H. Jones.

The subject which was assigned to me on the program seemed to me to be an admirable one for a general discussion rather than for a set paper, and so it seems to me to be the better way to prepare this topic in that way and talk over this matter somewhat informally.

Of course, it goes without saying that constitutions are adopted primarily for carrying on the object of the institution intended to be subserved by its adoption—and in order to understand the objects and intentions of any constitution it will be necessary to study the history of the Association for which it is prepared, as well as the objects and intentions to be carried out by the Association.

In order that we may understand the objects of the Association as defined by the new constitution, we must go back sixteen years to the original organization of the Association of State Dairy and Food Departments which met at Detroit, Michigan, August 25, 1897, and we find there the representatives from the states of Colorado, Connecticut, Iowa, Massachusetts, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin, ten states in number, for the purpose

of forming a national Association in which, and at which, the perplexing questions involved in enforcing the dairy and food laws of the different states might be discussed and mutual aid rendered with the end in view of producing, as nearly as conditions and laws would permit, uniformity of action in the enforcement of such laws.

A Committee on Constitution was appointed and its report adopted without amendment. There was but one difference of opinion in the committee and that arose over the naming of the association. The prevailing view was that it should be called the National Association of State Dairy and Food Departments. There were some in that association who thought it ought to be called "The National Association of State, Agricultural, Dairy and Food Departments." This view was defeated and the association became one devoted to the consideration and discussion of the problems arising in the enforcement of the laws in the different states relative to dairy and food questions; also to the securing of uniform laws, rulings and standards thereunder as well as uniformity in action among the various food officials of the different states. The name of the association, as given it in Detroit, remained unchanged until the meeting at Portland, Oregon, in 1901, where it was changed so that it became "The Association of State and National Food and Dairy Departments," the broadening of the Association at this time being simply to take in the national department that enforced food and



ALFRED H. JONES,
State Food Commissioner of Illinois.

dairy laws in order that the food officials of the different states might coöperate with the national food officials in the enforcement of state and national food laws.

As stated, the objects of this new association were to promote and foster such legislation as would tend to protect public health and prevent deception in the manufacture, sale and use of dairy, food and other products intended for human consumption—also to promote uniformity in legislation and rulings relative to the dairy and food products and to enhance the efficiency of dairy and food laws by developing an acquaintance tending to harmonize the interests represented by those charged with the enforcement of such state laws.

The object, as stated, at that time has remained unchanged since. The number of states having dairy and food laws have increased from ten in 1897 so as to include forty-seven—every state in the union but one, as I am informed—and also the national Government, as Congress passed a national food law in 1906, which went into force January 1, 1907. This seems to indicate that the American people are gradually coming to a realizing sense that a proper surveillance must be placed over the distribution and sale of all food products—the substances which are taken in the human system. It

is not only a question of fraud and finance that is involved, but in many instances it is a question of health and life. With these underlying principles as the motive for action, the different states have enacted laws somewhat similar—modeled after the National Food Law, and yet, often different in verbiage due to one or both of the following reasons:

First—The local demands consequent upon local views.

Second—Where the local views are similar, due to different views, as to the proper wording to produce the results desired, under court decisions of the different states.

At the meeting of the Association of State and National Food and Dairy Departments at New Orleans in 1910 it was thought that more effective work could be done by this Association to divide into separate sections or groups under one common parent organization, and upon the motion of Hon. James Foust, Commissioner of Pennsylvania, a committee for revising the constitution was appointed from the floor of the Association. There were six members of that committee with Dr. Charles D. Woods of Maine as Chairman. The Chairman of this Committee reported at the fifteenth annual convention of the Association of State and National Food and Dairy Departments at Duluth, Minnesota, in 1911, that the Committee on Revision of the Constitution had been at work during the past year and find themselves confronted with pretty difficult problems; that the Committee was appointed without instructions; it found itself embarrassed as to the methods of procedure and asked instructions from the body of the Association as to the plan of revision, stating that it was obvious that the Association wanted the constitution revised and broadened and that the committee wished instructions along the lines it should proceed.

After instructions from the Association, Dr. Woods, as chairman of the committee, presented an outline of the proposed constitution and asked for written suggestions and stated fully to the Association the objects sought by the committee in drafting the new constitution, and after hearing the reports the Association received preliminary report of the committee, and upon motions duly passed, the committee was continued with authority to revise the constitution along the lines of broadening the work of the Association.

As a member of the committee, I feel that we have prepared for this Association an excellent constitution, and that while the work of the committee has been somewhat severe, the work of the chairman, Dr. Woods, has been arduous and untiring, and that the Association, under this new constitution, can broaden its work and make it more effective than in the past.

When we take into consideration the wondrous growth of our Association in the past sixteen years, the great results accomplished by it; that we now have every state organized, a national food law, and nearly every state food law modeled after the national law and coöperation, not only among state food officials, but state and national food officials as well, and the manufacturers, packers and retailers of the various food products of the country respecting and abiding by the laws, ruling and standards made under these laws, state and national; we can see how necessary it is to have a broad and comprehensive constitution for this Association so that the greatest good can be accomplished at our annual meetings.

The name, or title, of this Association, "The Association of American Food and Drug Officials," is more broad and comprehensive than the old title "Association of State and National Food and Dairy Departments," and the objects of the Association are what we have been contending for for the past sixteen years, viz.: "The object of this Association is to promote and prosper the enactment and enforcement of such uniform legislation as will tend to protect public health and prevent deception in the production, manufacture and sale of dairy and other food products and drugs."

It provides for the Committee on Coöperation Between State and National Food Officials and that the committee shall take the necessary steps to promote the coöperation in the enforcement of the national food and drugs act and the food and drug laws of the several states.

It provides that the sections of the Association shall be: (a) The Association of State Food and Dairy Executives; (b) a Section of Dairy Officials; (c) a Section of Analysts; (d) a Section of Food and Drug Control Jurisprudence, and such other sections as the Association may from time to time find it necessary to organize.

The constitution provides that no section shall pass any resolution affecting the policy of the Association, but all such matters as may arise in the sections shall be referred by them to the Association as a whole.

This Association was organized chiefly for the purpose of

securing a national food law, so that the various states in the union might frame their laws, modeled after the national food law, and also make rulings and fix standards for the various food products so that the commissioners of the different states could make similar rules and standards, and thus obtain uniformity of action and thereby the work of coöperation could be carried on between the national and state food officials more effectively. We now have secured a national law. It took seven long years of hard work with the various committees of the House and Senate in Congress before the law was passed. This national food law has proved a success, and already nearly every state in the Union have had their laws rewritten and modeled along the lines of the national food law and have made rulings in conformity with those made by the national food authorities, coöperation has already been secured between the national and state food officials and already the manufacturers and packers of foods understand the national food law and the rulings made thereunder as well as the new laws by these various states and modeled after the national law. Now the manufacturers and packers of foods are only required to keep only one set of labels for nearly every state and territory in the Union, and they now know if they properly label their goods to conform to these rulings—national and state—they will overcome the inconvenience and troubles of the past, and after all this has been obtained it is fitting and proper that this Association should have a constitution that meets the requirements of the Association and the progress of the times.

Let us make no mistake. Let us see that the good work that has been accomplished in the past sixteen years is not lost. Let us go on along the lines laid down by our illustrious predecessors, and the work of enforcing national and state food laws will be comparatively easy, and the work of the Association, under this constitution, will meet the advanced conditions growing out of the enforcing of food laws—state and national—and food control work.

The President: Gentlemen, discussion of this valuable paper by Mr. Jones is now in order. The Chair desires to state that, unless it be otherwise the pleasure of the body, he will limit each speaker to five minutes, and no speaker will be heard twice, until every other gentleman who wants to speak has an opportunity to be heard.

Mr. Allen of Kentucky: Mr. President, since this paper on the constitution is to be discussed tonight, I move that further discussion be postponed until that time, in order to facilitate other business.

The motion was duly seconded.

The President: It has been moved and seconded that the discussion of this paper be postponed until this evening. Is there any discussion upon the motion? All in favor, signify by saying "Aye." Those opposed "No." The motion is carried. Discussion of this paper is postponed until this evening. We will pass to the next order of business.

The President: The next paper is entitled "Under what Department of the State Government Can Food and Drug Laws Be Most Effectively Enforced?" by Dr. M. E. Jaffa, of California.

Dr. Jaffa of California: Mr. President, and Ladies and Gentlemen: I owe you an apology for not having prepared a paper on this subject, but I understood from a letter received from our worthy President, that I was merely to take part in the discussion, and was not to write a paper on the subject, and I had not seen a program of the convention before leaving Berkeley. However, I have jotted down a few points, which I think will set forth my views, and I feel confident that they will not meet with the unanimous approval of all present, and I certainly would not want to bring about such a condition, because if we have no discussion, there is nothing of interest going on. Our views and opinions were first based upon theory, because we had no law, but they have been strengthened and reinforced by the practical and efficient application of that theory. I think that we are all agreed that there are two objects in view in the enforcement of a food and drug law in any state: First, to protect the honest manufacturer from the dishonest; and, second, to safeguard, to the highest degree, the food of the consumer, and, of course, also, the medicines. Our purpose is to attain these ends with the maximum of efficiency, and the minimum of expense.

Perhaps, a review of the conditions in California, and the way we administer law, might not be out of place. Our law is modeled after the Federal law, because we believe in uniformity. It may be that it would be more convenient, and easier, and simpler if every state were to make its own laws and enforce them, regardless of what was happening in the next door state. But we are not here to do that which is easiest, that which is simplest. We are here for the purpose

of getting the best good for the general public, and it goes without saying, that we cannot do it unless there are uniform laws from one end of the country to the other. It is not right or proper to have a product legal in New York, and contraband in California. If each state were taken as a separate country, and had nothing to do with its neighbor, then well, and good, but if each state is, as it ought to be, a unit of the one whole, we certainly, in order to get ideal conditions, ought to have uniformity of laws. We do not agree that the Federal law is perfect. Neither is any state law perfect. But one of the objects of this association as I take it, is to get together, and note the imperfections of the national law, and try to remedy at the sessions of congress. Then, when that is remedied, automatically these features are eliminated from the state laws.

In our state, the law is exercised by the State Board of Health, and the Secretary of the State Board of Health is the executive officer. The Secretary of the State Board of Health and a lawyer constitute the Board of Food and Drug Inspection. The State Board of Health is allowed to select a certain place for the laboratory, and the board selected the University of California, the Department of Nutrition, as the location for its laboratory. We think that we did very well, in the first place, by having a laboratory for such work provided at a university, as it takes it out of politics, which we think is very desirable. We think it is a very wise proposition to get the control out of politics, and it has remained so since about four and a half years ago. The benefits and advantages gained by having the laboratory located at a university are that we have a large library to refer to, able men to consult, complete apparatus to use, opportunities for research, and a great many other advantages, that need not be named here.

Again, it has been found advisable to place fertilized control in the hands of the university, or at experimental stations in all parts of the country. Therefore, why is it not just as well to place in the same hands the administration of the food laws? If it is so important to have efficient control over the food of the soil, why is it not more important to have efficient control over the laws applying to the food of men? Having the laboratory in the Department of Nutrition at the university, gives added force to the work, and, again, knowledge of nutrition has proven very useful in court cases. In addition to that, it is necessary to interpret properly analyses of cattle and poultry foods, in a large number of cases, because in California we have no special cattle, or stock, or poultry food law, but our general food law covers the food of man, and all other animals; and, as I say, in several instances, the advantages of having the work in the laboratory done in the Department of Nutrition have been proved.

Among the many advantages that exist in having the laboratory and the food law under the control of the State Board of Health, is, in the first place, economy. One set of men can do the work of two, sometimes three. For instance, a first class drug inspector is, or ought to be, a first class food inspector. A first class food inspector—a man of the right type, and right calibre—should be a first class sanitary inspector. And, therefore, one able man can do the work of drug inspection, food inspection and sanitary inspection, in any one town, and thus save time and expense. Again, you save bothering the dealer or the retailer. It is less than a month ago that a druggist was complaining to me of the fact that he had been visited by five inspectors in one day: First, the inspector of the State Board of Pharmacy; second, the state drug inspector; third, the city inspector; fourth, the sanitary inspector; and fifth, the state insecticide inspector. He said if they kept that up, he would have to pay more attention to the inspectors than to his customers. (Applause.) There is a point to that, and that is that we should not arouse the opposition of the retailer. As you all know, without getting appropriations, we cannot exist, and we want the coöperation of the retailer. The more the dealer is harassed, and bothered, the less likely he will be to coöperate with us, and help us along in the work. Without coöperation, we cannot get along. There are some who do not agree with this theory, and who say "make them," but you can get more flies with honey than you can with vinegar.

Another advantage in having this work done by the Board of Health, is that we can better coöperate with the state institutions, to the end that the supplies furnished these state institutions shall be of the best quality. When our laboratory first started, we found that the supplies that were sent to some of the state institutions were of very low grade. Take, for instance, vanilla extract; we found that the only vanilla about it was on the label. Within two years, that condition has entirely changed, and now the supplies furnished to the insane asylum and to the school of feeble minded, and so on, are of the best quality, as shown by the analyses made at our

laboratory. This coöperation can be best attained when the State Board of Health exercises the law; it can't be done perfectly under any circumstances, but it can be done more effectively when the State Board of Health has control of the administration of the law, because the State Board of Health controls the state hospital.

Again, by having this work under the control of the State Board of Health, we think we can get publicity cheaper and more efficiently than in any other way. That statement will probably be disputed, but in our state, it has proven so. The publicity that has been given the work, has done a great deal more good than have the fines that have been collected, and this will be true even more in the future, in view of the fact that the legislature thought it best at its last session to reduce the fine, the minimum fine, to \$5. The State Board of Health publishes a paper, in which are published the names of the violators of the law.

As I believe I have stated, one advantage of our system is that the State Board of Health can locate the laboratory whenever it chooses. The State Board of Health is appointed by the Governor, and as long as the present administration is in existence, the laboratory will probably stay where it is, but if the administration should change, it may be thought that the university is not the best place, and change its location, and the force would not go with it. Of course, the laboratory should be located at the university by law. The State Hygienic Board is, by law, located at the university, although it is under the jurisdiction of, and operated by, the State Board of Health. We hope to get a laboratory established at the university by law later on. There has been several attempts to get the laboratory away from Berkeley, with promises of better salaries and better equipment, but the effort was not strong enough.

Now, while we believe that the State Board of Health control is the best system for the exercise of the law, and of the laboratory, there are probably other ways of accomplishing good results, and I am willing to admit that if there are any places where they are getting a maximum of efficiency, with a minimum of expense, it would be foolish to change.

In summarizing, I might say that I believe the ideal conditions would be to have the law administered by the State Board of Health with the laboratory located at a university. If that is not possible, the next best plan is to have the enforcement at a university entirely, as in the case of Nevada or Maine; but, as I said just now, if it is successfully enforced otherwise, leave it alone. Again, I am heartily in sympathy with Brother Foust, when he says we should have a ten minute paper, and a fifty minute discussion. I have set forth my views, and it will not be long before others have been set forth, and thus will be precipitated an interesting and profitable discussion. (Applause.)

The President: Mr. Emery, of Wisconsin, is scheduled to open the discussion upon this paper.

Mr. Emery of Wisconsin: Mr. President, and gentlemen of the convention, my name was placed upon this program without my knowledge or consent, and it was not until within two days of the time of leaving that I expected to be in attendance upon this meeting of the Association. I have made no preparation for this discussion, and it will be extemporaneous.

The gentleman who presented the first paper or argument upon this subject made a statement as to the purposes of the food law. With the statement of the purposes of the food law, as given by him, I shall have to differ. I do not believe that the first and primary purpose of food laws is to guard the interests of the producers, and purveyors of foods. I believe that is entirely secondary. This is a stubborn fact that the first and primary purpose of food laws is to guard evils of food adulterations in this country, the combined manufacturers and purveyors are responsible as a class. I say that that cannot be successfully controverted. That is a fundamental truth that ought to be recognized in all laws upon this subject. If you go back to the beginnings of this movement, and consult the reports of the chemists of the ten states who organized this Association, and the reports of the United States Department of Agriculture, you will have some vague conception of the vast amount of fraud and deception that was being practiced upon the American people. I have attended these meetings for ten years, and never have I heard, to my way of thinking, so clear and forceful a presentation of the objects of this movement, as have been set forth by the President of this University and by the Governor of this State. They recognize in this movement—the dairy and food movement—the so-called pure food movement, one part, one branch, of this great movement that is going through this country, whereby the people, the sovereign people, are determined to regain for themselves what has been taken away

from them by the forces of special interests, and that movement, gentlemen, is here to stay, and the pure food movement, as the President of this University and the Governor of this State have well said, is a part of that great movement.

Now, gentlemen, if I am correct in this—and I defy successful contradiction of this proposition—if I am correct in this statement, then, to say that the first and primary purpose of a food convention, of a convention of food officials, paid by the states to do their work, paid by the states to investigate the conditions, and know what the law should be, paid by the states to enforce those laws, in behalf of the people, paid by the states to come to this convention for consultation, then, I say, if those propositions are correct, the first object of this body is not to guard the interests that have produced this vast amount of adulteration and fraud. The first and foremost purpose of such a convention should be, if it has any legitimate purpose, to help safeguard the interests of the great mass of the consuming public, and, in that respect, the proposed change in our constitution is vitally and radically wrong. Our old constitution did set forth and does set forth what I have stated here as the first and fundamental purpose or object of this Association—to safeguard the interests of the consuming public; and, secondarily, only to such an extent as does not interfere with the first object, to secure the necessary uniformity. This is my proposition: I would not impose any unnecessary hardship upon the manufacturing or producing food interests; nothing that is unnecessary to the accomplishment of the object of safeguarding the public; but that much of hardship I would impose, if the hardship there must be. Now, so much for the objects of the Association, wherein I reverse the order of their importance.

Now, gentlemen, if we magnify simply any department—if we depend upon any machinery simply—if we magnify that, we shall, in my judgment, greatly fail in our purpose. I believe that here, as elsewhere in this great work, it is the man behind the law that is the great force, the great power. When I recall the great work that is being done, and has been done for these years in North Dakota under its system whereby a professor in the Agricultural College is made the food commissioner of the state, I recognize in that system excellence, but then, when I recall that if another man than Dr. Ladd had been there, that work might have been very different. I am not prepared, then, to say that this system is adapted to the enforcement of food laws. And when I recall the great work that is being done in Indiana where Dr. Barnard is under the employ of the State Board of Health, I am again reminded that if someone else than Dr. Barnard were in the employ of that board, the results might be very different in Indiana; so I am not extolling anyone's system. When I think of what has been done in my own state, and in neighboring states, to Wisconsin, and elsewhere by men who are enforcing the food and drug, and dairy laws of the state, in enacting such laws, as well as protecting the consuming public—I say, as St. Paul said, "This one thing I do," and that has very much of merit; but when I recall that the accomplishments by these states have been quite as much or even more by the men who are administering these laws, by their intelligence, by their integrity, and by their devotion to the cause, I am again led to say that the system is not all important.

There is one principle, however, that I think, eventually, we shall come to recognize. I do not say that it shall prevail now, at once, but eventually. This one thing, I predict, will prevail, in regard to conferring police power upon professors in state educational institutions. I think the time will come when the public will object to that. I think the time will come when the people of this country will insist that our educational institutions, normal schools, universities, agricultural colleges, or whatever they may be, shall limit their functions to educational lines, and will refuse to extend to them the police power, in controlling the people of the state. I think that this is recognized by some of our great institutions already, and they are establishing those lines, and, as I have said before, I believe they will prevail. (Applause.)

Mr. J. G. Winkjer of Minnesota: Mr. President, while in the main, I agree with Commissioner Emery's statement. I believe that he has taken a different point of view than Dr. Jaffa took in presenting his side of the question. The statement that was made by him in his talk, I think, conveyed the idea that the protection should go to the honest dealer; and there is just exactly where the trouble comes in the adulteration of foods. If one unscrupulous dealer makes the adulterations, then he makes them in competition, in such a way, that the honest man cannot do business in the way he wants to do it, and so it leads on to the trouble we have. That is one point. And, on the other hand, I think Commissioner

Emery struck it just right when he said that it is not so much the place where the food control is put as it is the men who are controlling it, and I think we should take encouragement from his statements and use our best efforts in honest administration of our offices. (Applause.)

Mr. Judd of Oregon: That a State Board of Health or any other board should appoint the dairy and food commissioner does not appeal to me; nor does it appeal to me that the governor of any state should appoint such an official. These are days when some of the people think that they are coming into their own. I can see no reason why the people are not just as much entitled to, and should not elect their dairy and food commissioner, the man who enforces the laws, which are the most important to them of all. I can't see the reason why the people should not elect that man just as well as elect the man that enforces the law, such as a justice of the peace in a country precinct. The man who has charge of enforcing such important laws should have the full responsibility. He should be responsible to no other one man and to no board; but should be responsible only to the people. If he is elected by the people, the people hold him responsible, and they will see that he does perform his duty, or he will not continue in office. Then, this official is "it." He does not have to bow to the will or whim of any board or of any one man. He is perfectly free in the appointment of his subordinates.

Now, regarding the State Board of Health, this board is usually composed of physicians, a very important and necessary profession. But there are some people who get it into their heads that the doctors of today are demanding too much. They have their different organizations, their county and city and state organizations, and now, a national organization, and now they are asking for a little more. Then, there are other people growing up who do not see things exactly as our friends the physicians do. I am not knocking against the physicians at all. My youngest boy is one. Some people say the doctors are asking too much. It is true that in some legislatures they have hard times getting through the legislation that they want for their State Boards of Health. For example, in our own State of Oregon they wanted to get a certain appropriation and some of those who were opposed to it got together and knocked them out, and then the boys of the State Board of Health had to come to us ordinary human beings in order to get the matter reconsidered. In such states where the State Board of Health controls the office, when you went to the legislature, you might have more trouble in getting your legislation. I am taking up too much time. But this is the point that I want to make, and it is the only excuse I have for occupying your time, and that is that the man who enforces the dairy and food laws should be elected by the people. (Applause.)

Mr. Barney of Iowa: Mr. President, this seems to me to be a sort of local proposition. In listening to the remarks made by the gentleman from Oregon, it appears that he is well satisfied to have the food commissioner elected there. I think Brother Jones and I are well satisfied to have him appointed in Illinois and Iowa, especially if we can be appointed. (Laughter.) When it comes to the matter of the enforcement of the law, I think that that depends upon the conditions in the different states. In Iowa, with our Board of Health, with an appropriation of about \$7,000 a year, I can't conceive of any way that they could enforce our food laws with that size appropriations, and without anyone doing work over the state as experts. Now, in our department, we have an appropriation in all of about \$51,000. We employ twelve experts, traveling over the state in the dairy work. I don't believe that you could go to Iowa and change that system in a very short time. The work is being done very satisfactorily, I think. I conceive that it might be that this Board of Health, if it had that appropriation, and were doing the work as well as it is being done there, or as well as it is being done in many other states under the Board of Health. I do not believe it could be changed in those states, so I believe it is up to us to do the work as well as we can under the conditions that we have, and not try to make changes in these different states. (Applause.)

The President: Gentlemen, is there any further discussion? Does Dr. Jaffa desire to close the discussion?

Mr. Jaffa of California: Mr. President, I think that what Commissioner Emery has said is perfectly true, but if we go right down to the bed rock, I don't see how we are going to protect the consumer, unless you first get the manufacturer to make pure food. If you don't get the manufacturer to make pure food, how will the consumer get it? I agree with the gentleman from Iowa, that it is largely a question of locality. I would like to state further, in addition to what

I said before, that the Board of Health controls the work in our state, but there is a special appropriation made for food work, exclusive of the general appropriation for its other work. But that appropriation is extremely small, and I think, in view of the fact that we are only able to employ four inspectors for the whole state, and only three chemists, our record for the work done is quite good.

The President: This subject being closed, we will pass to the next order of business, which is a paper by Dr. E. F. Ladd of North Dakota, on "Publicity for the Work for Food Inspection and the Best Methods of Obtaining It."

Mr. Ladd of North Dakota: Mr. President and Ladies and Gentlemen: In discussing this question, as in other questions, I am going to discuss it more largely from the standpoint of our work, of course, in North Dakota, because there I have worked the method out to the greater satisfaction of ourselves, while, like on many of these other questions, other methods in other states may be found more successful.

PUBLICITY FOR THE WORK OF FOOD INSPECTION AND THE BEST METHODS OF OBTAINING IT.

By E. F. Ladd.

I am asked to discuss briefly the question of Publicity for the Work of Food Inspection and the Best Methods of Obtaining It. I shall at this time present something of my own experience and work in North Dakota, hoping thereby to induce a discussion of this one of the most important features of work in connection with the enforcement of food laws.

I am aware that manufacturers and wholesalers are naturally opposed to publicity. They know that publicity is more effective than fines in correcting food evils. In 1903 I stated:

"One commendable feature in the food law of the state (North Dakota) is the required publicity in an official way. Nothing will drive wrong-doers to correct evils more quickly than publicity. Let the public know that this or that manufacturer's goods are not pure but adulterated and the discriminating public will refuse to purchase, and the retailers no longer find it profitable to handle the products."

However, before publicity can become effective, educational work is essential. The people must first of all be educated. I hold, therefore, that the first and greatest benefit to be derived from the enforcement of the food law is to carry on an educational campaign. This is an essential part or feature of the North Dakota law, and has become most effective in correcting evils in this state. Not only has it tended to correct evils in North Dakota, but I am convinced that its influence has extended far beyond our confines, and many instances could be cited in confirmation of this, some as far away as Texas and even distant New England states.

There were two ways whereby the department charged with the enforcement of food and drug laws and with the sanitary inspection having to do therewith may proceed: he may at once prosecute every dealer found violating the food, drug, sanitary or beverage laws of the state; or, he may adopt a method of publicity and education, pointing out to the dealer or manufacturer wherein his product is in violation of the law, and in most cases the retail dealer, particularly, has been found willing to accept the recommendation, especially when he finds that public sentiment, backed by various state organizations, is opposed to the methods which have been employed. It seems to me, therefore, that it is our first duty under the laws which we have to enforce to make a campaign for education which shall enable the people to know of the frauds which are being practiced and of the injurious ingredients which are employed.

The speaker has, therefore, followed the method of pointing out to the manufacturer and dealer wherein the law has been violated, and then, if persistent violation was had, prosecution would follow; first, to enforce respect and obedience to the law on the part of the violator; and, second, to serve as an example before the public showing that the law must be obeyed and respected.

We have upon our statutes too many laws which are practically dead-letters, or are only enforced spasmodically, until it has come to be generally considered that the American people have not much respect for law—a statement I fear all too true. No matter which method the official adopts, he is sure to be criticised by those who differ with him; but, having adopted a method, its details should be carefully worked out and consistently followed to the end, and sooner or later the public will come to respect your views. After years of experience, I am convinced that a limited number of prosecutions is all that is necessary in order to secure proper

respect for the law on the part of the retail dealers of North Dakota, for my experience has taught me that, we may say, 90 per cent of the retail dealers are honest in their endeavors to comply with the requirements of the law; about 5 per cent are ignorant of their business, unfit for their calling, and should be digging ditches, or doing other work which is better adapted to their make-up; while about 5 per cent are downright crooks and no law will stop them, for they will seek evasions at every turn. These men must be weeded out or imprisoned before there can be a correction of the evil.

We may, therefore, divide the work in North Dakota into two classes: official reports of publicity and non-official publicity.

OFFICIAL REPORTS.

The law of North Dakota provides three methods of placing the information before the public.

First. There shall be an annual report made to the Governor, giving the information with regard to all products inspected, analyzed or reported upon during the year. This report naturally has a limited circulation, but it serves as a basis of information for schools, for public libraries, for public speakers, and women's clubs.

Second. The law also provides that the department shall publish bulletins giving information, not only official information with regard to the particular samples examined, but also all data which is collected in connection with the investigation and which will be found of interest to the public. We are, therefore, publishing a monthly bulletin that has come to be recognized as of great value to all those in the state interested in the betterment of food and sanitary conditions. This bulletin goes to every grocery store, every drug store, and practically every professional man in the State of North Dakota; it goes also to the members of the majority of the women's clubs, the civil leagues and the medical profession of the state, as well as having a considerable circulation among the farmers of North Dakota.

Third. The law further provides that twice each year, Jan. 1 and July 1, a list of all illegal products which have been analyzed during the preceding six months shall be compiled, giving the reasons for declaring the same illegal or misbranded, and that this list shall be furnished to the county auditor of each county in the state, who, in turn, is required to have the same published in each of the official county papers; this means from two to six of the principal papers in each of the forty-six counties in North Dakota. Thus, about 200 local newspapers officially give the information to the people of the state. The newspapers receive the same compensation for publishing this information as they do for publishing county proceedings, and are paid in the same manner. People in all parts of the state have come to look for these semi-annual publications; they preserve the same; and not infrequently, they are posted in the homes or in the stores, as furnishing a list of products found in violation of the law of the state. As an example of the influence of this last publicity, I may state that one ice cream manufacturer has stated, within the past few months, that the publicity given to his products during the past year has decreased his sales more than \$2,000. His goods were classed as misbranded for the reason that he had used rennet in the preparation of his ice cream, and did not inform the public of this fact. The public, therefore, discriminated against the product, who had been misled through his claim. Who can say, then, that publicity does not affect the sale of products and so reach and influence the manufacturer?

Another instance: A manufacturer of syrups, whose goods were listed repeatedly as illegal (not being pure maple as represented), stated to the speaker that this same report had seriously affected his sales from North Dakota to Texas; and that in Texas the publicity received was being used against him by his competitors. Still another firm which withdrew from the State of North Dakota, after six years found it necessary to return and do business within the state, although they did not particularly care for the trade of North Dakota, but it was necessary to do this, in order to hold their trade in other states, as their competitors were using this fact as an argument against the sale of their goods.

NON-OFFICIAL PUBLICITY.

The greatest educational work comes through non-official publicity; through accepting invitations to speak before the various organizations of the state, and the carrying on of an educational campaign which shall interest and enlighten the general public, I early discovered that the women's clubs of the state were more interested in the question of foods than the men, and any appeal that was to be made to the public should come through women's organizations; therefore, I ac-

cepted every invitation to speak before women's clubs, the state federation, civic leagues, church clubs, the public schools, and any organization where opportunity was furnished for discussing problems that would be of interest to the members of the organization itself. Today, many of the women's clubs of the state have one of their meetings during the year set aside for the discussion of questions in connection with pure food problems, sanitation, etc., and they look to the department to furnish information that will be helpful to them in the day's discussion; or call upon the department to furnish a speaker for the occasion.

Invitations to speak before the State Grocers' Association gives opportunity for the discussion of questions particularly of interest to them; before the Druggists' Association at their annual convention, I consider the discussion of drug problems, patent and proprietary medicines, etc.; while the State Medical Association has frequently invited the speaker to present papers and questions in connection with patent and proprietary medicines, fake preparations and other matters which are of interest to them; also, questions in connection with the sanitary work of the state.

Another important feature has been the preparation of illustrative exhibits to be used at county and state fairs, and this year we have had an exhibit on the Good Farming train which visited many of the principal towns and cities of the state.

I have also made it a point to speak before the schools of the state, especially the high schools, when opportunity afforded, and thus interest, as far as possible, the pupils who not infrequently prepare essays or papers dealing with problems in connection with food matters, and at times hold debates discussing questions relating to foods, sanitation and like matters, and look to this department for material suitable for such discussions. In this way, the question is brought before the people of the community in a way that makes an impression upon their minds.

The writer has often been accused of trying his cases in the papers before they are tried in the courts. I do not deny but that at times I think this good policy. The man who manufactures or sells adulterated and misbranded food products likes to keep the matter hushed up as far as possible. To place the matter before the people, give them a chance to understand what the difficulty is, where the fraud lies, and what your claims are, is to create a public sentiment which stands for what is best, and has its influence in the community for the betterment of conditions; therefore, I do not hesitate to say that in important cases, I consider it good policy to give the press the information, and if there are those who call this trying cases in the papers before they are tried in the courts, then, well and good—I am favorable to it. If the manufacturer is convinced I have gone beyond the facts, he has an avenue of redress through a restraining order from the courts.

In conclusion, I consider it essential for the highest success in the enforcement of food, drug and sanitary inspection laws that we have the support of the public at large. Therefore, publicity and educational work is the first essential to success, for no law can be successfully enforced much beyond what the public sentiment of the community stands for. The methods to be pursued are those that we are perfectly willing and anxious for the public to have the full history of, placing the information before them, knowing that if our stand is correct, the public will sustain us; and if we have taken a false step, the public will not approve of it. Thus far, I have found the public sympathetic and ready to give their influence where the matter has been made public and an educational campaign carried on. When laws have been found defective, the public have stood ready to aid in securing the enactment of other laws to remedy or prevent the evil.

The President: Discussion is now in order. Mr. Saunders of Virginia is scheduled as opening the discussion on this subject, but Mr. Saunders is not present. It is a most important subject, and I hope we will have a full and free discussion of it.

Mr. Crumline of Kansas: Mr. President, the most efficient moral disinfectant is more publicity. A large dealer said to me a year or so ago, "I would rather throw \$5,000 in the river than have our firm's name appear in your monthly bulletin." In Kansas, we pursue almost identically the same course as outlined in that most excellent paper by Professor Ladd. I think we have missed the greatest and most effective weapon in our hands, if publicity is not used in the enforcement of the food and drugs law. And, yet, with that, there must be intelligent use of publicity—publicity along educational lines in order to form and mold public sentiment, in a

state that will uphold your hand, for nothing truer has been said in the paper than that efficient law enforcement will not usually go in advance of intelligent support by the community. The method, I think, that is particularly commendable, and which I did not know was in force in North Dakota, thinking, perhaps, it was only in use in Kansas, is that special law we have on the statute books, which requires a certification to the official county paper, for we don't take misbranded food products for publication in the official county paper. That gets right to the heart of the thing. The circulation of our bulletin is not extensive enough, to be supplied to every family in the state. In our state, as in North Dakota, we aim to have every grocer and every druggist, every establishment manufacturing food and drugs on our mailing list.

Mr. Jones of Illinois: I would like to ask a question: Does your law provide that you can pay the papers for publishing this, or do they do it as a matter of gratuity?

Mr. Crumline of Kansas: The law provides that it shall be paid for the same as official county printing is paid for. Many professional men and club women and the teachers of the state, and every country superintendent of schools, and every high school superintendent is on the mailing list for the bulletin, and in many of the high schools, it is used as a text book. In the city of Topeka, in the classes on physiology, and chemistry, it is frequently used as a text book. The classes are required to make recitations from articles printed in our bulletin. In our judgment, the matter of publicity is the most efficient weapon in our hands, and yet, as I say, it must be used intelligently and guardedly. There are occasions when we have to make announcement of errors having been made in our bulletin, which we always do willingly. Our experience is, that the manufacturers are more afraid of the publicity they will get than they are of the fines. I remember one instance where a creamery company had been fined for something they did in the manufacture of their butter. There was a trial, and they were fined \$1,500. Yet, with all the expense of that expensive litigation, and the heavy fine, the loss of business was their greatest punishment, the loss of business being brought about by the publicity given the matter. The very severe punishment which this publicity carries with it would guard us, and cause us to be very cautious and very careful of our ground before we proceed. We should be very sure of the guilt of the person or persons who are called to account for their misdeeds. The very seriousness of the matter, and of the consequences, should make us all the more guarded and cautious, but once we are sure that there has been a violation, after repeatedly calling their attention to the delinquencies, then, I think it is time that the people of the state should know it, and that is the time to use the publicity.

Mr. Emery of Wisconsin: I would like to ask a question: Do you publish these reports previous to conviction in court?

Mr. Crumline of Kansas: We publish the analysis only before conviction, and then, after conviction, publication may be made, at the discretion of the board.

Mr. Emery of Wisconsin: Well, you are not uniform. (Laughter.)

Mr. Caspari of Maryland: Mr. President, I want to say just a few words by way of congratulating the two previous speakers on the favorable conditions existing in their states. I wish we had similar conditions in the State of Maryland. Our law is one of the youngest on the docket, and we have no way of publishing results previous to conviction, unless we can do so through the good will of the county papers. They even go so far as to undertake to charge us for the publication of rulings that may be made in our department. They seem to be very loth to do anything to benefit the people. But we have followed a plan very similar to that outlined by Dr. Ladd in his very interesting paper—that is, accepting invitations to speak at meetings of woman's clubs, civic leagues, and so forth. The law in the State of Maryland does not require publication of any kind, but it says that after conviction, notice shall be given in such a manner as the State Board of Health shall direct, and the State Board of Health has decided that this may be by form of circular, or otherwise, as the conditions may demand. There is no denying the fact that the fullest publicity possible is going to be extremely healthful in the work. The druggists in our state were made very uncomfortable a year or a year and a half ago, on the occasion of their annual meeting, when I read them a long series of figures, which were the results of analyses of different preparations, such as tincture of iodine, and so forth. They said they did not know that such conditions existed, because they had not looked into it. We have not followed the plan that I observe has been followed in certain states—that is, giving notice, that on such and such a

day, the state drug and food inspectors will make an examination for the purpose of determining whether the dealers are carrying in their stocks preparations that are up to the standards set. We do not follow that plan. We send out inspectors and get two or three samples from each druggist, and cover the whole state once or twice a year, and then, afterwards, we let them know the results of our investigation. We consider that it is rather unfair to give the dealers previous notice that we are coming around to make an investigation at such and such a time. In fact, I was told that quite a number of the dealers carried two lines of stock on their shelves, one standardized goods for the use of the inspectors, and the other unstandardized goods for the use of the customers. I want to endorse very emphatically, this idea of publicity, and only regret that we haven't it developed to the same extent in Maryland, as you seem to have it in North Dakota, and also in Kansas.

Mr. Flanders of New York: Mr. President, I should like to ask Mr. Ladd a question: Mr. Ladd, do you publish the result before conviction?

Mr. Ladd of North Dakota: Yes; they are all published before conviction, and before they go to court. Our law provides for that.

Mr. Flanders of New York: Then, Kansas and North Dakota are about alike in that respect?

Mr. Ladd of North Dakota: No; we haven't got together in that respect. Whenever any analysis is made, and the analysis shows that the goods are not up to standard, I send notice to the parties who are interested that their goods have been found illegal, or passed, or were not standard, or whatever was found to be the fact, and they are advised that if they have any explanation to make, they make it. In the next bulletin, the findings are published. I have had to defend myself in libel suits, not infrequently in connection with the enforcement of our law, and I expect that I shall have to do it again, but I am going to keep on with just the same methods, nevertheless. (Applause.) If I have got a thing that is wrong, that is, if in my own mind it is wrong, I don't hesitate to say so. If I believe that a product is right, and that we are wrong, I don't hesitate to say that. I don't hesitate to publish in my bulletin what I believe to be right. I don't hesitate to put in my bulletin, and I do put it in, that seventy per cent of the vinegar sold in North Dakota as cider vinegar is not cider vinegar, and as soon as we get the means, in the way of proper analytical methods, for the purpose of showing the exact facts, I expect to prove my statement.

Mr. Russell of Oklahoma: Mr. President, I think that publicity is the greatest weapon for the enforcement of the food laws. I think it is more effective than the judgment of a court or the infliction of a small fine. But publicity can be misapplied, in my opinion, to the damage of a house or a product where a manufacturer is innocently the victim of a circumstance. Let me illustrate my point: In Oklahoma, recently, we got a sample of lard. When the chemist's report was made, it showed that the majority of the samples taken were adulterated with dirt. The chemist's report was published in bulletin form, giving the name of the retailer and the name of the packer responsible for the sale and the packing. The packers immediately objected, saying that their product was above standard when it went to the retailer, and that it had passed the Government inspectors. They came to the commissioner and objected to the publication of the chemist's report in the bulletin, and holding them responsible and said that the lard when it left them was not adulterated with dirt. Well, a re-examination was made. New samples of the lard was taken and sent to the laboratory, and upon analysis were approved. But the damage by the publication of the chemist's previous report had been done. Other instances have crept in whereby the publication of the chemist's report has done damage to the wholesaler. For instance, recently there was a line of pepper sold to an Oklahoma jobber, under his particular brand, a staple brand of his. A sample of that pepper was taken and put in the laboratory, and analysis made and reported adulterated with ground olive stones. The wholesaler immediately turned to the manufacturer and demanded a guarantee, and the manufacturer said he would protect the wholesaler until the matter was threshed out and settled, but, in the meantime, the chemist's report had been published, and while the controversy was going on and the wholesaler and manufacturer were trying to get together, the opposition grocery houses were sending out articles and irreparable damage was done to the house that had that particular brand. So, the publication in that particular case did do an injury. The manufacturer, a non-resident, brought that adulterated product into the state of Oklahoma and made our

local jobbers suffer thereby, and the case is now supposed to be on the road up to Uncle Sam. So, while I believe that publicity is a great weapon in the enforcement of food laws, yet I believe it can be diverted into some channels where damage will be done, and those who are the innocent holders of a product covered by a guarantee.

Mr. Emery of Wisconsin: Mr. President, we, of course, must always remember that we are administrators of law. That is our legal function. That is our duty. And when we resort to publicity for the purpose of helping us administer the law, we must expect to take the attitude set forth by Dr. Ladd. We are responsible for what we say and what we do. If we do injury to any man's product unlawfully, we are responsible. We are administrators of law. Dr. Ladd has said here plainly, "I have drawn several libel suits and may draw more." He didn't add that he has always defended himself successfully against those suits. (Applause.)

Mr. Newman of Illinois: Along the lines that have been mentioned here, I would like to say just a word. Some time ago an attorney for a party that we had cited for hearing came in and called our attention to the fact that we had the previous year cited a couple of his clients into court for selling alleged impure foods, and he said he would try to enjoin the publication of our lists until we had gotten a conviction in the case; that the reports from the laboratory did not entitle us to call those goods illegal until the court had finally said so after a full hearing. That is one of the points that has been discussed here. I don't know whether any of you have had experience of that kind in other states, but it looks as if we are up against that proposition this fall. With respect to the matter of publicity, the papers in our state are so full of stuff of a sensational nature that it has gotten to a point that even when we write an article out and send it to them, ask for its publication, we do not get it unless it is very sensational, and, in many instances, when they do publish it, in order to make it sensational, they will make ridiculous statements in it and make it appear ridiculous. I have no doubt that many of you have seen articles in the Chicago papers that are positively ridiculous, and many of you have thought that we had gone crazy in the department. We have no provision for publicity, other than our annual reports, and I want to congratulate Dr. Ladd on the means that he has for publicity, and I would like to ask him, also, if he does not consider hearing one means of publicity.

Mr. Ladd of North Dakota: Yes; certainly a hearing is a means of publicity, unless it is a private hearing. If it is a private hearing, then, there is no publicity.

Mr. Newman of Illinois: Is there not some publicity to the one individual, even in a private hearing?

Mr. Ladd of North Dakota: Yes. Of course, that has its effect. I want to say that for every sample that is listed there is a card sent out to the parties interested, and in 90 per cent of the cases those men will correct the condition, or if the party interested is a retailer he will tell his wholesaler that he will not accept their goods and get them to withdraw the goods from the market.

Mr. Newman of Illinois: My experience is that the greatest amount of publicity that we have obtained in Illinois has been done through the hearings and unofficial publicity, and by addressing clubs and taking our exhibit around, and addressing private organizations. We have had our show all over the state and out of the state, and we felt quite complimented this summer when we were invited to bring it down to New York this coming fall and install it at their show down there. We have had requests for parts of our exhibit from the University of London. The greatest amount of good, I think, has been accomplished in Illinois through the hearings and unofficial publicity. We would like to have a publicity fund so that we could get out a monthly bulletin. We have about 4,000 manufacturers in our state and a bulletin should be circulated among them.

The President: Gentlemen, is there any further discussion? If not, we will proceed under the head of miscellaneous business, which is provided for by the new constitution in every day's session.

Mr. Allen of Kentucky: I wish to announce that the Committee on the Constitution will meet directly after lunch in the room to the left, as you go out of this building.

Mr. Judd of Oregon: It is now a quarter of one, and I presume they will be looking for us at lunch. Therefore, I move that we adjourn.

The motion was duly seconded.

Mr. Foust of Pennsylvania: The Committee on Resolutions would be very glad to have any resolutions presented, so that they may be considered by the committee.

Mr. Jaffa of California: Mr. President, I would like to make a motion to the effect that we meet earlier than ten o'clock tomorrow morning. I would suggest that we meet at nine, so that we can get through with the work and have an easy conscience when we leave on the boat ride on Friday.

Mr. Flanders of New York: I second the motion.

The President: Is there any discussion of that motion?

Mr. Caspari of Maryland: I would move to make it 9:30 at the earliest. Nine o'clock is too early to come away out here. It takes about forty minutes to come out here on the street car, and nine o'clock in the morning is too early to get here.

The President: Is there any further discussion? The amendment is not accepted. All in favor of the motion, please say "Aye." Contrary, "No." The motion is carried.

Mr. Allen of Kentucky: Mr. President, I would like to announce that the section on Food and Drug Control Jurisprudence will meet jointly this afternoon with Section A. As Section A has a short program, and as Section D also has a short program, we have arranged with Chairman Foust to meet together, and all who are interested will meet with Section A this afternoon at two o'clock.

The Secretary: Mr. President, I wish to state that there is no provision in the program for the roll call. The Credentials Committee cannot report until we have a roll call, and, apparently, no provision has been made in the program for a roll call.

The President: The chair will announce that this evening, at the special meeting in the Chamber of Commerce, we will have a roll call in order that the Committee on Credentials may get its duties straightened out. The Chair would further call attention to the fact that this is a most important meeting and this roll call meeting is of importance. The meeting this evening will be down town at the Chamber of Commerce Building, at 8 o'clock.

(Whereupon, at 12:50 o'clock P. M., adjournment was taken.)

WEDNESDAY, JULY 10, 1912.

Evening Session, 8:00 P. M.

The President: Gentlemen, the meeting will please be in order. The chair announced this morning that there would be a roll call the first thing tonight, but, unless there be objection, that roll call will be postponed, say, twenty or thirty minutes, in order to allow sufficient time for all the members to come in. The object of the roll call is to ascertain who is present, and to give the credentials committee material to work on.

There being no objection, we will proceed with the order of business for this evening, which, to begin with is the consideration of a new Constitution. How will you have this constitution considered? Will you have it read once for all, and vote on it as a whole, or have it read section by section, and vote section by section?

Mr. Charles Caspari of Maryland: Mr. President, I move that the sections be taken seriatim.

The motion was duly seconded.

The President: It has been moved and seconded that the sections of the Constitution be taken up seriatim, and, as I understand the mover, to be voted on seriatim. All in favor of that motion say "Aye." The opposed, "No." The "ayes" have it. It is so ordered.

Mr. Judd of Oregon: I move that Article I be amended, by inserting the word "Dairy," followed by a comma, between the words "American" and "Food," so as to read as follows: "This Association shall be known as the Association of American Dairy, Food and Drug Officials."

The motion was duly seconded.

The President: Gentlemen, you have heard the motion, duly seconded, that the word "Dairy," followed by a comma, be inserted between the word "American" and "Food," in Article I. Are you ready for the question? All in favor, signify by saying "Aye." Those opposed, "No." The motion is carried, and the article will be so amended.

Mr. Judd of Oregon: I move that Article II of the Constitution be adopted as read.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion, duly seconded, that Article II of the Constitution be adopted as read. Is there any discussion? All in favor signify by saying "Aye." Those opposed, "No." The motion is carried, and the Article is adopted.

Article II reads as follows: "The object of this Association is to promote and foster the enactment and enforcement of such legislation as will protect public health and prevent de-

ception in the production, manufacture and sale of dairy and other food products, and to promote uniformity in such laws."

The Committee on Constitution, having just arrived, Mr. William P. Cutler of Missouri moved a reconsideration of Article II, which was duly seconded and carried. Article II was then reread, and, upon motion, duly seconded, was adopted as read.

Article III, as reported by the Committee on Constitution, reads as follows: "The officers shall consist of a President, three Vice-Presidents, a Secretary, a Treasurer, an Executive Committee of five members, and the Chairmen of Sections."

Mr. Foust of Pennsylvania: Mr. President, I move the adoption of the Article as reported.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion, duly seconded, that Article III be adopted as reported. Is there any discussion? All in favor, signify by saying "Aye." Contrary, "No." The motion is carried, and Article III, as reported, is declared adopted.

Article IV, as reported by the Committee on Constitution, reads as follows: "There shall be the following committees: 1, an Executive Committee; 2, an Auditing Committee; 3, a Committee on Resolutions; 4, a Committee on Cooperation; 5, a Committee on Credentials."

Mr. Foust of Pennsylvania: Mr. President, I move that the Article just read be adopted as reported.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion that Article IV be adopted as reported. Are you ready for the question? All in favor, signify by saying "Aye." Those opposed, "No." The motion is carried, and Article IV is declared adopted.

Article V, as reported by the Committee on Constitution, reads as follows: "Article V. Election of Officers. Section 1. All officers shall be selected from voting members and elected by written ballot.

"Section 2. The President, the Vice-Presidents, the Secretary, the Treasurer and the members of the Executive Committee shall hold office until the last session of the next annual meeting, following their election, or until their successors are elected and qualified.

"Section 3. The President shall not be eligible for re-election. The Secretary shall be elected for a term of three years, and any offices vacated when the occupant ceases to be a voting member of the Association. The Executive Committee shall consist of the President and Secretary of the Association, together with three additional members who shall be elected by the voting members of the Association; provided, that at the first election, the first of the Executive Committee elected shall be elected for three years; the second, for two years; and the third, for one year, after which one member shall be elected each year to serve a period of three years.

"Section 4. Vacancies shall be filled for an unexpired term by election at the annual meeting. The chairman of sections shall be elected by the members of their respective sections."

Mr. Emery of Wisconsin: Mr. President, I move that Section 1 of Article V, as reported, be amended by inserting the words, "except the section officers," after the word "officers."

The motion was duly seconded.

The President: Gentlemen, you have heard the motion that Section 1 of Article V, as reported, be amended by inserting the words "except the section officers," after the word "officers." Is there any discussion? All in favor, signify by saying "Aye." Those opposed, "No." The motion is carried, and that section will be so amended.

Section 1 of Article V, as amended, reads as follows: "All officers, except the section officers, shall be selected from voting members and elected by written ballot."

Mr. Winkler of Minnesota: Mr. President, I move that Section 2 of Article V, as reported by the Committee on Constitution, be amended by inserting after the word "election," in the fourth line of that section, the words "except as herein otherwise provided."

The motion was duly seconded.

The President: Gentlemen, you have heard the motion that Section 2 of Article V, as reported by the Committee on Constitution, be amended by inserting after the word "election," in the fourth line of that section, the words "except as herein otherwise provided." Are you ready for the question? All in favor, signify by saying "Aye." Those opposed, "No." The motion is carried, and Section 2 of Article V will be so amended.

Section 2 of Article V, as amended, reads as follows: "Section 2. The President, Vice-Presidents, the Secretary, the Treasurer, and the members of the Executive Committee shall hold office until the last session of the next annual meeting

following their election, except as herein otherwise provided, or until their successors are elected and qualified."

A motion was made, and duly seconded, that the sections of the Association be abolished, and that the Association meet together in one body. The motion was not carried.

Mr. Caspari, Jr., of Maryland: Mr. President, I move that Section 3 of Article V, be amended by inserting, in substance, that the Executive Committee be empowered to appoint a temporary secretary, in case of inability of the Secretary to serve.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion, that Section 3 of Article V, of the Constitution as reported by the Committee on Constitution, be amended by inserting the provision that the Executive Committee be empowered to appoint a temporary Secretary, in case of inability of the Secretary to serve. Are you ready for the question. All in favor, signify by saying "Aye." Contrary, "No." The motion is carried, and Section 3 will be so amended.

Section 3, of Article V, as adopted, reads as follows: "Section 3. The President shall not be eligible for re-election. The Secretary shall be elected for a term of three years, and any office is vacated when the occupant ceases to be a voting member of the Association. The Executive Committee shall consist of the President and Secretary of the Association, together with three additional members who shall be elected by the voting members of the Association; provided, that at the first election, the first of the Executive Committee elected shall be elected for three years; the second, for two years; and the third, for one year; after which one member shall be elected each year to serve a period of three years. In case of disability of the Secretary to serve, the Executive Committee shall have power to appoint a temporary secretary."

Upon motion, duly made and seconded, Section 4 of Article V was adopted as reported, and reads as follows:

"Section 4. Vacancies shall be filled for an unexpired term by election at the annual meeting. The chairmen of sections shall be elected by the members of their respective sections."

Article VI, as reported by the Committee on Constitution, reads as follows:

"Section 1. The President shall preside at all meetings and annually appoint such committees as may be required, whose appointment or election are not otherwise provided for."

"Section 2. The Vice-presidents, in their order, shall act in the capacity of the President, when the President is absent, or, from any other cause, is unable to act."

"Section 3. The Secretary shall keep a record of the proceedings of each meeting of the Association and of the Executive Committee, and conduct such correspondence, and issue such notices as may be required by the Executive Committee. He shall, at least thirty days prior to any meeting of this Association, ascertain whether the President is qualified and will be present to act as such. If the President cannot act, the Secretary shall notify the Vice-presidents in their numerical order, to be present and act as President of the meeting."

"Section 4. The Treasurer shall keep in charge all funds of the Association and pay bills which have been audited and allowed by the Executive Committee."

Upon motion, duly made and seconded, Article VI was adopted as reported by the Committee on Constitution.

Article VII, as reported by the Committee on Constitution, reads as follows:

"Article VII. Executive Committee. Duties. Section 1. The Executive Committee shall annually elect one of its members chairman, and the Secretary of the Association shall be Secretary of the Executive Committee."

"Section 2. The Executive Committee shall arrange the program for the general meetings, and shall fix the time and place of holding meetings of the Association unless otherwise directed by the Association. When the time and place is fixed, the Secretary shall at once notify the secretaries of the sections, and shall also state the portions of the time to be occupied by the general meetings of the Association. When the Association is not in session, the Executive Committee shall act for the Association in such matters of business as may arise, or concerning which they may be instructed by the Association."

"Section 3. Meetings of the Executive Committee may be called by the chairman and shall be called on the written request of two members of the committee. Such calls shall state the time, place and the object of the meeting, and shall give each member at least ten days' notice of such meeting."

Article VII, upon motion duly made and seconded, was adopted as reported by the Committee on Constitution.

Upon motion, duly made and seconded, Article VIII was adopted as reported by the Committee on Constitution, and reads as follows:

"Article VIII. Committee on Resolutions. Section 1. The Committee on Resolutions shall be composed of the chairmen of the two sections, and three members to be appointed by the President at the first session of the annual meeting."

"Section 2. All resolutions shall be presented to the Association in writing, read by the Secretary, and five minutes allowed the introducer to explain the same, and referred, without debate, to the Committee on Resolutions, who shall report to the convention with recommendations at a time to be provided in the program by the Executive Committee."

Upon motion, duly made and seconded, Article IX was adopted as reported by the Committee on Constitution, and reads as follows:

"Article IX. Committee on Co-operation. Section 1. The Committee on Co-operation shall consist of three voting members of the Association. At the first election, the first elected shall be for three years, the second for two years, and the third for one year, after which one member shall be elected each year to serve a period of three years. Vacancies shall be filled for an unexpired term by election at the next annual meeting."

"Section 2. The committee shall take the necessary step to promote co-operation in the enforcement of the national food and drugs act, and the food and drug laws of the several states."

Upon motion, duly made and seconded, Article X was adopted as reported by the Committee on Constitution, and reads as follows:

"Article X. Membership. Section 1. The voting members of the Association shall consist of the Secretary of the United States Department of Agriculture and the executive officer or officers of state laws regulating the sale of drugs, and of dairy and other food products, or, in their absence, such officers subordinate to them in the administration of laws regulating the sale of drugs and of dairy and other food products, as they may designate by proper credentials."

"Section 2. All persons connected with the enforcement of state and Federal laws regulating the sale of drugs and of dairy and other food products are ex-officio members of sections and are entitled to all the privileges of the Association except voting and holding office."

Upon motion, duly made and seconded, Article XI was adopted, as reported by the Committee on Constitution, and reads as follows:

"Article XI. Voting. Section 1. In voting by ballot or otherwise, each state properly represented as provided in Section 1 of Article X, and the United States Department of Agriculture properly represented as provided herein, shall be entitled to three votes, which may be cast as a unit or in fractions thereof. No state or department more than one year in arrears of the dues fixed by the association shall be entitled to vote."

Upon motion, duly made and seconded, Article XII was adopted as reported by the Committee on Constitution, and reads as follows:

"Article XII. The Program. Section 1. The program of the annual meetings of the Association shall include an address by the President, reports of officers and committees, and such addresses on matters of general interest as may be arranged by the Executive Committee, programs of sections, as arranged by officers of sections, proposed amendments of the constitution, and such other business as the Association directs. Opportunity shall be given for miscellaneous business at each session of the annual meeting."

"Section 2. A preliminary notice of the convention shall be sent out at least ninety days prior to the time of holding the convention, and the full official program at least thirty days prior thereto."

Upon motion, duly made and seconded, Article XIII was adopted, and reads as follows:

"Article XIII. Sections. Section 1. The sections of the Association shall be: (a) the Association of Food, Dairy and Drug Executives; (b) a scientific section. Section A and B are empowered to adopt rules and regulations for their own government and business to obtain in such sections."

"Section 2. No section shall pass any resolution affecting the policy of the Association, but all such matters as may arise in sections shall be referred by them to the Association as a whole."

"Section 3. The chairmen of sections shall, at least sixty days prior to the annual meeting, refer the programs of their respective sections to the Executive Committee."

Upon motion, duly made and seconded, Article XIV was adopted as reported by the Committee on Constitution, and reads as follows:

Article XIV. Dues. The annual dues of the Association shall be fixed at the annual meeting of the Association.

Upon motion, duly made and seconded, the following was adopted as Article XV of the Constitution:

Article XV. Amendments. Amendments to this constitution may be made at regular annual meetings of the Association, provided that such amendment is duly presented for consideration at the previous annual meeting, and shall not be adopted except by a two-thirds vote of those present.

Upon motion, duly made and seconded, the following was adopted as Article XVI of the constitution:

Article XVI. Parliamentary Procedure. All questions of parliamentary procedure not provided for in this constitution or in by-laws adopted by the Association shall be determined by the President according to Robert's Rules of Order.

Upon motion, duly made and seconded, the constitution as read and amended and adopted by sections, was adopted and accepted by the Association as its constitution.

CONSTITUTION OF THE ASSOCIATION OF AMERICAN DAIRY, FOOD AND DRUG OFFICIALS.

ARTICLE I.—NAME.

This Association shall be known as the Association of American Dairy, Food and Drug Officials.

ARTICLE II.—OBJECT OF THE ASSOCIATION.

The object of this Association is to promote and foster the enactment and enforcement of such legislation as will protect public health and prevent deception in the production, manufacture and sale of dairy and other food products and drugs, and to promote uniformity in such laws.

ARTICLE III.—OFFICERS.

The officers shall consist of a President, three Vice-Presidents, a Secretary, a Treasurer, an Executive Committee of five members, and the Chairman of Sections.

ARTICLE IV.—COMMITTEES.

There shall be the following committees: 1, an Executive Committee; 2, an Auditing Committee; 3, a Committee on Resolutions; 4, a Committee on Co-Operation; 5, a Committee on Credentials.

ARTICLE V.—ELECTION OF OFFICERS.

Section 1. All officers, except the section officers, shall be selected from voting members and elected by written ballot.

Section 2. The President, Vice-Presidents, the Secretary, the Treasurer, and the members of the Executive Committee shall hold office until the last session of the next annual meeting following their election, except as herein otherwise provided, or until their successors are elected and qualified.

Section 3. The President shall not be eligible for re-election. The Secretary shall be elected for a term of three years, and any office vacated when the occupant ceases to be a voting member of the Association. The Executive Committee shall consist of the President and Secretary of the Association, together with three additional members who shall be elected by the voting members of the Association; provided, that at the first election, the first of the Executive Committee elected shall be elected for three years; the second for two years; and the third for one year, after which one member shall be elected each year to serve a period of three years. In case of disability of the Secretary to serve the Executive Committee shall have power to appoint a temporary secretary.

Section 4. Vacancies shall be filled for an unexpired term by election at the annual meeting. The chairman of sections shall be elected by the members of their respective sections.

ARTICLE VI.—DUTIES OF OFFICERS.

Section 1. The President shall preside at all meetings and annually appoint such committees as may be authorized or required, whose appointment or election is not otherwise provided for.

Section 2. The Vice-Presidents, in their order shall act in the capacity of the President, when the President is absent, or from any other cause is unable to act.

Section 3. The Secretary shall keep a record of the proceedings of each meeting of the Association and of the Executive Committee and conduct such correspondence and issue such notices as may be required by the Executive Committee. He shall, at least thirty days prior to any meeting of this Association, ascertain whether the President is qualified and will be present to act as such. If the President cannot act, the Secretary shall notify the Vice-Presidents in their numerical order, to be present and act as President of the meeting.

Section 4. The Treasurer shall keep in charge all funds of

the Association and pay bills which have been audited and allowed by the Executive Committee.

ARTICLE VII.—EXECUTIVE COMMITTEE, DUTIES.

Section 1. The Executive Committee shall annually elect one of its members chairman, and the Secretary of the Association shall be Secretary of the Executive Committee.

Section 2. The Executive Committee shall arrange the program for the general meetings, and shall fix the time and place of holding meetings of the Association unless otherwise directed by the Association. When the time and place is fixed, the Secretary shall at once notify the secretaries of the sections, and shall also state the portions of the time to be occupied by the general meetings of the Association. When the Association is not in session, the Executive Committee shall act for the Association in such matters of business as may arise, or concerning which they may be instructed by the Association.

Section 3. Meetings of the Executive Committee may be called by the chairman and shall be called on the written request of two members of the committee. Such calls shall state the time, place and the object of the meeting, and shall give each member at least ten days' notice of such meeting.

ARTICLE VIII.—COMMITTEE ON RESOLUTIONS.

Section 1. The Committee on Resolutions shall be composed of the chairmen of the two sections and three members to be appointed by the President at the first session of the annual meeting.

Section 2. All resolutions shall be presented to the Association in writing, read by the Secretary, five minutes allowed by the introducer to explain the same, and referred without debate, to the Committee on Resolutions, who shall report to the convention with recommendations at a time to be provided in the program by the Executive Committee.

ARTICLE IX.—COMMITTEE ON COÖPERATION.

Section 1. The Committee on Coöperation shall consist of three voting members of the Association. At the first election, the first elected shall be for three years, the second for two years, and the third for one year, after which one member shall be elected each year to serve a period of three years. Vacancies shall be filled for an unexpired term by election at the next annual meeting.

Section 2. The committee shall take the necessary steps to promote coöperation in the enforcement of the national food and drugs act, and the food and drug laws of the several states.

ARTICLE X.—MEMBERSHIP.

Section 1. The voting members of the Association shall consist of the Secretary of the United States Department of Agriculture and the executive officer or officers of the state laws regulating the sale of drugs, and of dairy and other food products, or, in their absence, such officers subordinate to them in the administration of laws regulating the sale of drugs and of dairy and other food products, as they may designate by proper credentials.

Section 2. All persons connected with the enforcement of state and Federal laws regulating the sale of drugs and of dairy and other food products are ex-officio members of sections and are entitled to all the privileges of the Association except voting and holding office.

ARTICLE XI.—VOTING.

Section 1. In voting by ballot or otherwise, each state properly represented as provided in Section I of Article X, and the United States Department of Agriculture properly represented as provided therein, shall be entitled to three votes, which may be cast as a unit or in fractions thereof. No state or department more than one year in arrears of the dues fixed by the Association shall be entitled to vote.

ARTICLE XII.—THE PROGRAM.

Section 1. The program of the annual meetings of the Association shall include an address by the President, reports of officers and committees and such addresses on matters of general interest as may be arranged by the Executive Committee, programs of sections, as arranged by officers of sections, proposed amendments of the constitution and such other business as the Association directs. Opportunity shall be given for miscellaneous business at each session of the annual meeting.

Section 2. A preliminary notice of the convention shall be sent out at least ninety days prior to the time of holding the convention, and the full official program at least thirty days prior thereto.

ARTICLE XIII.—SECTIONS.

Section 1. The sections of the Association shall be: (a) the Association of Food, Dairy and Drug executives; (b) a scientific section.

Sections A and B are empowered to adopt rules and regulations for their own government and business to obtain in such section.

Section 2. No section shall pass any resolution affecting the policy of the Association, but all such matters as may arise in sections shall be referred by them to the Association as a whole.

Section 3. The chairman of sections shall, at least sixty days prior to the annual meeting, refer the programs of their respective sections to the Executive Committee.

ARTICLE XIV.—DUES.

The annual dues of the Association shall be fixed at the annual meeting of the Association.

ARTICLE XV.—AMENDMENTS.

Amendments to this constitution may be made at regular annual meetings of the Association, provided that such amendment is duly presented for consideration at the previous annual meeting, and shall not be adopted except by a two-thirds vote of those present.

ARTICLE XVI.—PARLIAMENTARY PROCEDURE.

All questions of parliamentary procedure not provided for in this Constitution or in By-laws adopted by the Association shall be determined by the president according to Robert's Rules of Order.

The proposed "Cold Storage Bill" was then read and discussed.

Mr. Flanders of New York: Mr. President, I move that the bill be re-referred to the committee for further consideration.

Mr. Judd of Oregon: I second the motion.

The President: Gentlemen, you have heard the motion that the proposed cold storage bill be re-referred to the committee for further consideration. Is there any discussion?

Mr. Bryan of Illinois: Mr. President, I move to amend the motion by adding to it that the committee report to the convention next year, and that they send a copy of the bill in the best form in which they can succeed in drafting it by the first of December to the executive of each state in the Association.

The motion to amend was duly seconded.

Mr. Allen of Kentucky: Mr. President, I move as a further amendment of the motion that the Secretary prepare and send each member of the committee a copy of the bill, and ask for suggestions, and then out of that, prepare a final draft, and then report it December 1st, or whatever time Mr. Bryan has suggested for it, in order that the committee may have the assistance of the experience and suggestions of all the members before bringing it back next year.

The amendments were accepted.

The President: Gentlemen, you have heard the motion and its amendments. Are you ready for the question? All in favor of the motion signify by saying "Aye." Contrary, "No." The motion is carried.

A motion to adjourn was duly seconded and carried, and the meeting was declared adjourned.

THURSDAY, JULY 11, 1912.

Morning Session, 10:00 O'Clock.

The President: The meeting will please come to order. The first paper on the program this morning is, "The Necessity for Drug Control and the Best Means of Enforcing Pure Drug Laws," by Dr. A. N. Cook of South Dakota.

THE NECESSITY FOR DRUG CONTROL AND BEST MEANS OF ENFORCING PURE DRUG LAWS.

By Dr. A. N. Cook.

For at least ten years, the food departments of the various states have been very active in enforcing the pure food laws. The success has been marked, and it may be said in general that deleterious substances have been prohibited from foods consumed by the public and the most palpable frauds have been eliminated. However, comparatively little attention has been given the subject of pure drugs. While a goodly number of states have pure drug laws on their statute books, not all of the states have been active in their enforcement.

We have had a pure drug law on the statute books of South Dakota since 1907, but little effort was made to en-

force it until a short time ago, as the Department was necessarily busy with other duties. About three years ago, we began analysis of drugs on sale in the drug stores of South Dakota, with a view to determining conditions as they then existed, and as a result, it was disclosed that only about 39 per cent of the drugs prepared in our drug stores were within 5 per cent of the standards set by the Pharmacopoeia, and many of them varied very widely. For example, tincture of iodine varied from 25 per cent to 289 per cent; tincture of iron 0 per cent to 143 per cent; Fowler's solution, from 47 per cent to 257 per cent; sirup of ferrous iodide, from 80 per cent to 184 per cent; lime water varied widely, and in many instances seemed to be only tap water. Spirits of camphor varied from 55 per cent to 170 per cent, and many other United States Pharmacopoeia preparations varied in like manner. We continued to analyze samples taken at the drug stores for two years, in order to show druggists just how bad the situation was, in the hope that this mode of procedure would serve to correct conditions, but at the end of two years it was discovered that there was no improvement whatever, except in case of Fowler's solution.

Preparations sent out by many of the wholesale druggists, even from companies that claimed to deal only in assayed goods and which passed in interstate commerce without ques-



ALFRED N. COOK,
Food and Drug Commissioner of South Dakota.

tion, have been found to vary widely from the requirements of the Pharmacopoeia. The necessity for drug control work, therefore, is very evident, since, if the drugs on sale are not even approximately of standard strength, they cannot be depended upon to produce any desired physiological effect, which said drugs are claimed to produce, and valuable lives may be lost as a result. There is no doubt that hundreds of thousands of human lives have been sacrificed in the various states of our Union from this cause.

The tendency of the present age is for the drug business to become commercialized. The pharmacist becomes absorbed in the buying and selling of goods to such an extent that he forgets much of what he has learned in school with regard to scientific accuracy and the necessity of exercising care in the preparation of his drugs and the dispensing of the same. Many of them have fallen into the habit of allowing untrained, unregistered men to make their preparations and put up their prescriptions. I fear, also, that some wholesale druggists doing business in the state are even now in the habit of employing cheap, unskilled, unreliable help in the preparation of valuable remedies, and that even when skilled help is employed, sufficient care is not taken to prepare them

so that they will comply, even approximately, with the requirements of the Pharmacopœia.

After studying the drug situation in the state of South Dakota for two years, and being brought face to face, in the enforcement of this law, with the momentous task of correcting the stocks of about 600 drug stores, it appealed to me that the first step which should be taken was to determine just how much latitude might reasonably be allowed to the pharmacist in making up his preparations, just how far they may be allowed to vary from the standards of the Pharmacopœia and still not interfere materially with their physiological effects when administered as remedies. I have entrusted this duty to a Drug Standards Committee, the members of which are paid their expenses and salary per diem during the actual time they are employed. The chairman of this committee is one of the best pharmacists of the state; the second member is a young, well-read physician, and the third a representative of a wholesale drug firm. It was thought a committee of this complexion would, perhaps, be the best that could be secured, since it would bring to us the various views of the pharmacist, the consumer and the wholesaler. At the last meeting of this committee we invited also the members of the State Board of Pharmacy to meet with us, which they did, and took part in the deliberations and assisted in establishing standards. I talk over with this committee the various phases of drug law enforcement, receiving suggestions from them, submitting tentative plans and methods for their opinion as to the advisability and probable efficiency of the same.

It would be a very difficult task to require druggists to bring all of their drugs up to standard by a given date—so difficult that I feared that many druggists would be perfectly at sea and unable to comply. I chose the method of selecting lists of twenty drugs each, which are announced at given periods of about two months. These the druggists must bring up to standard by a given date. All unlisted drugs are allowed to go uninspected so long as these respective lists have been brought up to standard by the set time. These lists have usually been selected by the Standards Committee, an endeavor being made, of course, to select those of greatest importance first. Circulars are issued at frequent intervals which are mailed to every druggist in the state, in which suggestions are made, misunderstandings corrected and cautions given. The drug inspector, who is a practical pharmacist, visits all drug stores, and not only takes samples, but gives the pharmacists any needed instructions and cautions about methods of preparing and storing such preparations as sweet spirits of nitre and other preparations subject to rapid deterioration, and gives all assistance in his power. A report is made to the commissioner of all drug stores inspected, which is filed in the office. The method seems to be working admirably, and nearly all of the druggists of the state are making strong efforts to comply. In case of those who do not make sufficient effort, samples are taken by the inspector, which are analyzed in our laboratories, and the party is recommended for prosecution if such preparations are not found to comply with the law. Only a few prosecutions have so far been made, but we never hesitate to recommend guilty parties for prosecution whenever it is found necessary. The department had previously made a reputation in the state for law enforcement, and when we began to use this method with regard to druggists, they felt that we meant business, and universally, they went to work diligently to correct their stock. The method we have adopted allows the pharmacist time to build up his stock gradually without any material financial loss. They are looking ahead and are buying standardized tinctures and guaranteed, assayed goods, not only of the advertised lists, but all other drugs, as they know that it is a matter of only a short time until everything they dispense must be up to standard. I feel that I can say that we are meeting with good success in our efforts, and the work has the hearty support of all the leading druggists. I do not mean to give the impression that the problem is an extremely easy one, however. The path of the Commissioner is thorny and rocky, but, up to date, we have avoided striking a rock or treading on a thorn. Just how long this condition of things will continue we cannot tell, but we are exceedingly cautious about every step, and future prospects are encouraging, and I believe that within a comparatively short time we shall be able to point with pride to the fact that among the very best drugs and druggists in the country are those to be found in the state of South Dakota.

I will read the following paragraphs from Bulletin No. 25 of February 2, 1912, issued by the South Dakota State Food and Drug Department to the druggists of South Dakota:

"Buy only the best drugs. Don't run any risks in buying tinctures and preparations from cheap John houses. They may be cheaper in the beginning, but dearer in the end.

"I advise you to throw away your old stock unless you know absolutely it is all right, or are in a position to assay it. Get in the habit of putting on the bottles, or recording in some convenient place, the date when each preparation was made.

"Do not trust the preparation of your drugs or the filling of prescriptions to an incompetent assistant. He may get you into trouble. We expect soon to begin to examine prescriptions filled in the drug stores of the state to determine whether they are accurately prepared.

"Be sure to weigh your drugs accurately and measure carefully. In weighing, be sure to use a good, accurate balance. Don't measure in the old-fashioned, conical measuring glasses, but use accurately graduated cylindrical vessels instead.

"Don't guess at anything in making up a preparation. D. F. Jones, chairman of our Drug Standards Committee, makes the following suggest:

"There is great danger of mistakes in the transposing of weights and measures from one system to another, and I would further recommend that all stores equip themselves with accurate measures in the metric system."

"Do not, under any circumstances, fail to provide yourselves with the latest Pharmacopœia and the National Formulary, if you do not have them already. One druggist who failed to follow this suggestion has recently had cause to regret it to the tune of \$10 and costs.

"Don't use rain water in making up your United States Pharmacopœia or National Formulary, or any other preparations, or in filling prescriptions. Rain water is, usually, most unsanitary and will not comply with the requirements of the Pharmacopœia.

"Every time a bottle containing Fowler's solution is opened, a little air is let in which oxidizes a small portion of the arsenic and weakens the solution.

"Be sure to follow the directions of the Pharmacopœia closely in making tincture of iodine, or the potassium of iodide may remain undissolved and your preparation will not stand the test.

"Prepare your sweet spirits of nitre in the smallest possible quantities. Keep in a cool, dark place. When it gets to be a month old, throw it away and prepare a new stock, as it has been demonstrated that sweet spirits of nitre will not keep long without deterioration.

"Don't trust to making up your dilute hydrochloric acid without assaying it. If you are not in position to do this, you should purchase it already assayed from some reliable jobbing house. Quite a number of druggists have been caught on dilute hydrochloric acid. If you have been preparing your own without assaying it, I would advise you to throw it away and purchase the assayed product.

"In traveling over the state, I have heard physicians say that they have been compelled to put in a stock of their own drugs, as the drugs on sale in their drug stores were not reliable. The analyses made of drugs in South Dakota in the past would seem to indicate that there might be some grounds for that complaint. But if it has been true in some cases in the past, if it has been given as an excuse—whether true or not—let us see that it cannot be offered as an excuse any longer. I have found in my travels about the state that where a drug store is dirty and unkempt and a loafing place for the riffraff of the town, physicians, as a rule, were dispensing their own drugs."

The President: Gentlemen, Dr. Crumbine is scheduled to lead the discussion upon this very interesting subject.

Dr. Crumbine of Kansas: Mr. President and Gentlemen: I have very little to offer to the very excellent paper given by Dr. Cook. The necessity for drug control seems to be quite apparent, for, if medicines are necessary at all, in the cure or mitigation of disease, in man or animals, it is self evident that those medicines should be of known quality and strength, if the prescriber or attending physician is to count on the results. At the beginning of the enforcement of the Kansas food and drug law we were somewhat amazed at the condition of affairs that the analyses of drug preparations disclosed. I think, perhaps, that most people have an idea that when they want to get something that is absolutely pure, they can go to the drug store and get it. Our experience has proven that that is not the case. I think, during the first year, the analyses of samples secured by our inspectors revealed the fact that about 60 per cent were adulterated. That is, to say, they were not up to standard strength; probably it is fair to say that samples, in many

instances, were suspected of being sub-standard or adulterated, and it is altogether likely that that percentage would not have prevailed if samples of unsuspected preparations had been taken. Nevertheless, when we speak of adulterations as being of sub-standard there is more adulteration, and, certainly, more misbranding among druggists today than there is to be found among food products.

Now, as to the best method of enforcing drug laws, perhaps, it is somewhat difficult to say as to what is the best method, because we are very largely in the experimental stage in this country. Our own methods in Kansas have been about like this: Immediately after the passage of the food and drugs law, a committee of the chemists of the State Board of Health, including the food chemists, as well as Professor Sayre, who is, by law, charged with the direction of drug analyses, and the Secretary made an extended visit around over the state, asking in advance the coöperation of the commercial club, that all dealers should be invited to attend these meetings. The dealers in the nearby towns to the larger centers of population were informed, and we were very much gratified at every place we went by having a very large attendance of the dealers, not only the grocery dealers, both wholesale and retail, but the druggists as well.



S. J. CRUMBINE, M. D.,
Secretary of the State Board of Health, Kansas.

That work occupied, at irregular intervals, perhaps the first six months after the enactment of the law. The law and its measures were discussed, and incidentally the chemists were obtaining some very valuable information.

The President: Gentlemen, Dr. Crumbine's time has expired, but I think we can waive the time limit rule in his case to advantage, because I think Dr. Crumbine can tell us more than anyone else on this very interesting subject.

Mr. Crumbine (Resuming): At the outset, therefore, we had the hearty coöperation of the dealers. Drug control is a very delicate matter, delicate in this way, that there is a considerable portion of every drug stock in every drug store that has been in operation for any length of time that is sub-standard. Particularly is that true of certain extracts, and other preparations. This campaign of education was followed by a tour of inspection by two trained pharmacists. They were prepared to receive this inspection, and it somewhat modified the shock when their attention was attracted to the great amount of deteriorated and practically worthless stock that was on

hand. During the first year of the enforcement of the drug act in Kansas there were practically no prosecutions. There were hundreds of dollars worth of patent medicines and extracts that were positively worthless, which they were required to remove from their shelves. I think that would have been quite impossible without first making this visitation that we undertook. In the meantime the drug laboratories were busy in solving many of the problems which are always present in drug control.

One thing that we found, and I am sure it will be the experience of every other commissioner, that the stores that were in the poorest condition were the stores that were chiefly engaged in selling liquors. Kansas, being a prohibition state, we very early formed the opinion that those classes of stores had not really any existence, either as drug stores or as booze joints, and we made it known very plainly that that class of stores would be held to a very strict requirement, and in one city, where we first undertook inspection, it was not long until thirteen of those stores were out of business. The prohibitory authority seemed to be unable to handle the situation previously, but under the drugs act those stores could not longer continue in business. I think the enforcement of the food and drugs act did more to clean up the booze drug stores in Kansas, or as much, at least, as any other one thing, and I think the same thing would be found to be true in states that are not prohibition. I would advise the commissioners, by all means, to look well to the booze drug stores.

There is another matter that I desire to speak of before I resume my seat. More and more, in the larger cities, the drug stores are becoming restaurants. They have departments in many stores where they are serving lunches and selling pies and cakes and such things. I don't know what the modern drug store is getting into. It is difficult to tell whether it is a restaurant or a drug store. In the modern drug store there is usually a large, handsome fountain and a place to serve lunches and other departments. So the commissioners have need to supervise these places very carefully, and if there is a whiskey joint in connection with them, then is the time to go after them, because those people don't care what kind of drugs they have.

One of the great evils of the drug business is that of substitution. Our department has failed to take any excuses for that sort of thing. There can be no legitimate excuse given for substitution, and I am sure that the provisions of the law should always be enforced where that is done.

Disinfectants is also a problem that properly belongs to drug control. In our state we have undertaken very recently to standardize disinfectants. As a matter of fact, most of the so-called disinfectants are not disinfectants at all. They should receive the very careful scrutiny of commissioners.

Mr. Chairman, this subject is very interesting, but I have consumed so much time that I ought to sit down. However, before I conclude, I will state that I think those states that have not drug control should not rest easy until they secure it.

Mr. Emery of Wisconsin: Mr. President I would like to ask a question: I understood Dr. Crumbine's statement to be that the retailer cannot be held directly responsible for the purity of the goods that he sells.

Mr. Crumbine of Kansas: You misunderstood me. I was speaking of the first year of our control, when we were making an educational campaign; we were holding him more directly responsible than the manufacturer; I was speaking of that question only in our educational work, the first year.

Mr. Emery of Wisconsin: In your state are the pharmacists required to pass an examination and hold a license for the selling of drugs?

Mr. Crumbine of Kansas: Yes, sir.

Mr. Emery of Wisconsin: They are expected to be able to make analyses of these drugs, and know whether they are up to standard or not.

Mr. Crumbine of Kansas: They are expected to be able to do so, but they are not equipped to do so. Drug analysis is a very difficult proposition.

Mr. Emery of Wisconsin: That is the theory upon which they obtain the license from the Legislature—to keep the other fellow from selling drugs.

Mr. Crumbine of Kansas: Yes. We do hold them responsible for the quality of the drugs they sell, whether they buy or manufacture them.

Mr. Emery of Wisconsin: When your trained pharmacists inspect drug stores, do they have the right to remove the drugs without analysis?

Mr. Crumbine of Kansas: They have not the right of condemnation, but there are many preparations that the in-

spectors can discover the quality of without analysis. It does not require an analysis to reveal the sub-standard condition of many of the drugs in stock.

Mr. Emery of Wisconsin: We don't have the skilled pharmacists to make the inspection in the drug stores, but the substances are analyzed in the laboratory.

Mr. Crumbine of Kansas: In Kansas an opportunity is given to remove the material from the shelves that appears, from an eye examination, to be unfit for use.

Mr. Emery of Wisconsin: Our experience has been that the druggists have been more disposed to play the baby act than the grocers when examinations have been made and they have been ordered to remove certain goods from their stock.

Mr. Hansen of Nebraska: Mr. President, this is a very interesting subject to me, as I am a retail druggist and I would like to say just a few words in regard to drug inspection. The adulterations that were found, on the coming into effect of our law, were a natural consequence of the druggists being in the business and doing business under the old system in the old way. When this law took effect, we found a good many things that we had not expected to find, and the drug business was in bad repute. There were adulterations and prevarications upon practically every package that we had in the house, not only those of a proprietary nature, but those that were supposed to be pharmaceutical preparations manufactured by pharmaceutical houses. For instance, a certain line of specific tinctures was supposed to represent the absolute strength of the drug, but the truth of it was that it didn't. When the pure food law took effect the new packages that came out had a different kind of a label on them, of which, I have no doubt, Dr. Crumbine knows. Those pharmaceutical preparations oftentimes, I think in most cases, after being prepared, commence immediately to deteriorate, and I would advise the commissioners when inspecting pharmaceutical preparations of any kind of remember that there may be a possible chance that they have deteriorated in quality, because a great many of them—in fact, a large percentage of them—deteriorate immediately or commence to deteriorate immediately after they are prepared. In Nebraska we were in the same situation that they were in every state of the Union without a doubt, except where, perhaps, the drug stores were whiskey joints. We were not so situated in Nebraska, although there were some districts that practiced the sale of liquor considerably. I don't believe that the inspectors found, when going about the state examining crude drugs, very much of adulteration. Crude drugs, as a general thing, were pretty good. For instance, I looked up for my own curiosity crude drugs, and I found most of them all right. I am of the opinion that the pharmaceutical houses need as much watching as the druggist does. For instance, a well known syrup not long ago aroused my curiosity and I took opportunity to look into it, and I found that it was supposed to be a pharmaceutical syrup. You can realize my astonishment when I discovered that it was glucose used to carry the medicinal substances. I, from a druggist's standpoint, desire a very thorough examination of the drug business and drug inspection, and I think the commissioners should look to it and see that preparations not alone that are being manufactured by the pharmacists, but the preparations that are manufactured by the pharmaceutical manufacturers throughout the land meet the standard—a very essential thing to do. I think you will find that the druggist, before the law took effect, had wandered into the habit of making his preparations by diluting the substance sent to him, according to the formula, figuring that the formula was truly what it was said to be; but, upon investigation, he found that when he had diluted these preparations, according to the formula on the bottle, he didn't have the preparation up to standard, and when the inspector came along and found that kind of a preparation, it was no wonder that the druggist was in bad repute, and that his preparation was not a good preparation, because he had been deceived by what was on the formula that he had received. This is a very interesting subject to me, and you will pardon me if I have intruded on the time of someone else, but in closing my argument I desire to say that pharmaceutical preparations should be examined, whether in the hands of the physicians or in the hands of druggists, and they should be carefully investigated to see whether they are in accordance with the label that they carry. (Applause.)

Mr. Edwin De Barr of Oklahoma: Mr. President, I want to add just a word to what has already been said. While I haven't any more sympathy with the manufacturer of pharmaceutical preparations than I have for the retail man—none in the least—yet I want to say that the dealer has not much excuse for not keeping what is known as a clean stock.

There is not a single manufacturer of fluid extracts that I know of, of repute, who will not instruct his retail customer, who purchases from him, to set aside any deteriorated fluid extract that is sub-standard, and he will take it back. He is glad enough to have it cleaned up and taken off the shelves. So, if the retailer will be careful to watch these preparations, and notify the manufacturer when he has deteriorated products on hand, the manufacturer will take them back, and the retailer will be allowed credit for them.

Here is the worst proposition that we have to deal with in the control of drug stores: There is generally provision made in most states for an assistant in a drug store, who is not a capable pharmacist, and while the pharmacist who is registered is supposed to be in control of the store, the other individual is allowed to sell pharmaceutical preparations that are not allowed to be dispensed except on prescription. Spell it tincture of iodine, or any other preparation. Take tincture of aconite. The clerk is allowed to sell tincture of aconite by most of the proprietors. The making of tinctures from fluid extracts is a pernicious practice. Whenever I go to a drug store, as I act as inspector many times, I always make it a point to look up whether these tinctures are made from fluid extracts or not. They can be detected, if you are experienced, the moment you look at them. A fluid extract cannot be diluted in connection with the making of a tincture, and give you a tincture of the proper appearance and color and consistency.

Mr. Hansen of Nebraska: Don't you think it would be proper for the manufacturer to be forbidden from putting on the labels improper writing?

Mr. De Barr of Oklahoma: I most certainly do. You can't make a good tincture from a fluid extract. It is impossible to do that. You can't make syrup of wild cherry officially from fluid extracts. I would draw the line just as closely on pernicious labeling with the manufacturer, as I would for the retail dealer. I don't see that it makes any difference with the consumer, whether it is the retailer or the manufacturer who does the labeling. I want to stand for fair play in everything I do, and I want to do it in a way that is consistent with everyone. But, generally, a bad condition of the store is due to two or three things: The lack of care in trying to keep a clean stock, the unsanitary conditions, and the laziness of the man in the trade. A man who is up-to-date in the drug trade will keep his stock just as clean as a gent's furnishing store. He will sell out his odds and ends at certain intervals, or else ask the manufacturer to take them back.

Mr. Caspari of Maryland: Mr. President, I regret very much that I was not present when the paper which is now the subject of discussion was read. I feel that it must have been a very interesting paper. The question arises in my mind, How many of the food and drug commissioners of the United States have been practical pharmacists?

The President: Dr. Caspari, permit me to interrupt you just a moment. Gentlemen, Dr. Caspari is a newcomer with us, and possibly a great many of us do not know just what he has done before he got to us. I want to say that Dr. Caspari is one of the foremost and one of the most prominent pharmacists and writers on the subject in the United States. I suggest that someone make a motion that the time limit be withdrawn for Dr. Caspari, as I know you will all find what he has to say of value.

Mr. Jaffa of California: Mr. President, I make that motion.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion to withdraw the time limit for Dr. Caspari. All in favor, signify by saying "Aye." The motion is carried.

Mr. Caspari of Maryland: Mr. President, I do not wish at all to trespass upon the time of the Association, and I feel a little embarrassed at the fact of not having heard the paper read, but from what the two previous speakers have said, I judge that it hinges largely upon the character of the drugs found in drug stores, and remedies for relieving the conditions that exist.

If every drug and food commissioner in the United States were practically familiar with the details of pharmaceutical work, I think, at times, he would take a different view of the conditions from that which he now entertains. It has been my fortune—and I consider it a great fortune—to have served for a quarter of a century behind the counter of a drug store.

Pharmacy has changed immensely during the past fifteen or twenty years. Formerly, every pharmacist was his own manufacturer. Today, that is all changed. The pharmacist of today, either from lack of ability, or from lack of inclination, does not care to manufacture standardized preparations.

but he will buy such preparations from manufacturers, such as Parke, Davis & Company, and others who have their agents all over the country. This has something in its favor. There are some preparations, standardized preparations, which, if the pharmacist purchases from a reliable manufacturer, he is better off than if he makes them himself, and does not standardize them. I think that can hardly be denied. The question of diluting concentrated preparations, such as fluid extracts, is a very far-reaching one. It has been stated here, and with considerable truth, that it is absolutely wrong. But you must not overlook the fact that the pharmacist uses the fluid extract for making other preparations. Certain preparations, undoubtedly, the retail pharmacist should purchase from a large manufacturer. It is different with such things as Fowler's solution; such simple things as lime water, syrup of ferrous iodide, and the like. He can make them himself, and those he should be expected to make. But when you take a preparation like tincture of opium, which is so extensively used all over the country, I really believe that the retail pharmacist is better off taking them as a whole, in buying his preparations—that is, buying a reliable preparation from a large manufacturer—than in trying to make it himself, for this reason: The amount of tincture of opium used is small. It takes 100 cubic centimeters to make an assay. He ought to make at least two assays to get the correct result of his analysis. Now, if he makes a quart, and takes two ounces out of that for his assay work, it is very expensive. He is not going to do it. He is confronted by practical difficulties.

I make it a point to have my inspectors go all over the state and pick up the complex preparations, and also simple ones. The simple preparations are the preparations I look after more closely than I do the complex preparations, because, I think, as a rule, the complex preparations are manufactured by the large manufacturer. We think that the large houses cannot afford to put on the market preparations that are below standard. A cent's worth of lime will make ten gallons of lime water; there is no incentive for fraud there, even if a man wanted to permit fraud, yet you would be surprised if you were to know the facts. As I said, the large houses cannot afford to put on the market preparations that are below standard. Their reputation is at stake. Their business is at stake, and I feel that they do all in their power to put on the market preparations of good quality. Of course, they deteriorate. Take such a preparation as ergot. Preparations of ergot have been known to deteriorate.

The President: Dr. Caspari, our experience in Tennessee has indicated a very considerable change in the character of the drug business within the past fifteen or twenty years, and I think if you would tell us something about that, it would be of very considerable interest and value here to all these gentlemen, many of whom are just starting in on the drug work; just a few remarks as to the changing character of the drug business, and possibly what the future may have in store.

Mr. Caspari of Maryland: If you ask me for my honest opinion as to the future of the business, I would say it is very dark. There is very little light to be observed. Commercialism practically has overridden professional pharmacy. An old-time pharmacist returning today from his grave would not recognize his old abode. He would be lost. A drug store is anything but a pharmacy, and that accounts for the fact that so few of the pharmacists today make the preparations that require a little more time and a little more experience. They rely upon the large manufacturer, and that system is not confined to this country alone. It exists in England and in Germany. The pharmacist of today becomes simply a retailer and purveyor of manufactured goods. I think that statement hardly admits of a question.

Mr. Hansen of Nebraska: Dr. Caspari, may I ask you a question regarding the stability of drugs and preparations? I would like to have you tell the association the stability of essence of pepsin. It is a preparation that is being manufactured in large quantities. That is, a preparation that needs investigation.

Mr. Caspari of Maryland: Pepsin will keep wairly well in a suitable place, provided it is not exposed to heat. If you put a pepsin essence in the vicinity of a radiator, as has been done, it will change, and its digestive power is destroyed and lost. If you expose pepsin to heat, it will go, and you can't find it.

Mr. Hansen of Nebraska: That brings your attention to the fact that there is as much in knowing how a drug store ought to be kept as there is in making the preparations.

Mr. Caspari of Maryland: Undoubtedly that is the case. I do not wish to throw a protective mantle over any class of men; the conditions that we meet with at present in the drug

stores are due to the changed conditions of pharmacy itself. That is true, not here alone, but elsewhere, all over the world, those conditions exist. The old apprenticeship system has been abolished. We all know that. When I entered the drug business, I served an apprenticeship of four years. I had to grind at the mill for a week at a time, and I got knowledge there that they do not get today at all. That practical experience has been to me of most incalculable value in my work as commissioner in the State of Maryland. I draw from my personal experience in past years, and my judgment, which has been ripened by that experience, and while it is absolutely necessary that every pharmacist should be held up to the full requirements of the law, and investigation should be made in every drug store, we must also consider the conditions that have brought this about, and we should not be too severe on the retailer, for conditions that he is hardly responsible for at the present time. I trust that all the commissioners in the various states—those who have drug control in charge—will continue the active work that has been begun, because, even if the pharmacists never go back to the old-time methods of making preparations it will have the effect of keeping them constantly on qui vive, and make them realize that the law is going to hold them responsible for the quality of the goods that they sell over the counter. We have had a great many prosecutions in Maryland. We have had twelve cases altogether, I think, growing out of the manufacture of sub-standard tincture of opium. Under our law, sub-standard tincture of opium preparations are not allowed. The Federal law does permit sub-standard goods, if they are labeled.

Mr. Crumbine of Kansas: Mr. President, I want to say this, for the benefit of our good friend from Wisconsin, that that very proposition which has just now been mentioned is one particular in which Kansas will not agree to uniformity.

Mr. Cook: Mr. President, I would like to ask Dr. Caspari a question. Dr. Caspari, I would like to know what you think about this point: How near should preparations come to the United States Pharmacopœia, in order to be considered legal? In other words, how much latitude should be allowed the ordinary substance like tincture of iodine, and a few other things?

Mr. Caspari of Maryland: Of course, my answer to that would be based entirely upon the position that we have taken in Maryland upon that subject, and it simply expresses the views of the office. We have naturally assumed, and I think we did right in doing so, that minor deteriorations such as are unavoidable from the very nature of things, should not be charged against the pharmacist, and hold to be violations of the law. I will cite one or two instances: Take, for instance, Fowler's solution, which should contain 1 per cent, by weight, of arsenic dioxide; we make an allowance, which we consider liberal of from nine-tenths to one and one-tenth. The preparation must show within that range upon assay. If we find it below nine-tenths, it is in violation of the law. In the case of tincture of iodine, where the normal amount would be seven grams per 100 cubic centimetres, we go so far as to allow six and eight-tenths, and we still take six and a half, from six and a half to seven and a half, coming within such limits as that, we consider it legal, or pass it. Along some other lines, we make a slight allowance, above and below. The pharmacists should keep the preparations in such a manner as to retard the deterioration as much as possible. All we can do, and we know it, as well as the pharmacists in our state, is to insist that they keep the preparations so as to retard the deterioration as much as possible. It is but fair to the pharmacist that the commissioner should make due allowance for deterioration within narrow limits, over which the pharmacist has no control. I think each commissioner must be a law unto himself regarding the position he is going to take as to the limits within which minor deteriorations may be permitted. But it would be a good plan, at such meetings as this, if we come together, and confer, so as to have a greater approach to uniform limits, within which we might require pharmacists to handle their goods.

The President: Gentlemen, The Chair suggested a very full discussion of this matter because it was believed that a very large number of the commissioners would be interested in it. We have now given the subject something like an hour and a half, and I would suggest that we return Dr. Caspari a vote of thanks for his kindness, in allowing us to pump him in this way, and that we proceed with the program. Dr. Cook, do you care to close the discussion?

Mr. Cook: Mr. President, I would like to have just a moment. In South Dakota we have taken up every one of the drugs that we are dealing with and discussed them, and have come to a conclusion as to how close they should come to the pharmacopœia standard. We have endeavored to dis-

cuss every drug thoroughly and we have brought out every point that has been brought out today, and we have established what we call standards. We have indicated how much latitude we can allow the local dealer in the preparation of goods, and still not interfere with the physiological value of the drug. I notice, however, that there are variations in different states. It seems to me that it is very desirable that we have a uniform standard throughout the country, in every state in the Union.

Mr. President, if you would entertain a motion at this time, relative to this subject, I would like to move that the President of this Association appoint a committee, a standards committee on drugs, with Dr. Caspari as Chairman, if he will consent to serve, in order that we may have a uniform system adopted for the use of all the commissioners in the United States.

The motion was duly seconded.

Mr. Emery of Wisconsin: Do I understand by this motion that the central thought is to establish a system of tolerances?

Mr. Cook of South Dakota: Yes, sir.

The President: Is there discussion on the motion? All in favor of the motion, please say "Aye." All opposed "No." The motion is carried, and the Chair will announce the committee at the session this evening. The next on the program is the paper of Dr. Cutler of Missouri.

THE NECESSITY FOR CO-OPERATION BETWEEN STATE AND MUNICIPAL FOOD CONTROLS.

By W. P. Cutler, M. D.

If the theory of coöperation between the national food control officials and the state food controls is a good one, if it makes for success in food inspection work in the interest of the consumer, I am of the opinion that it obtains with even more force in the coöperation between state and municipal food controls.

The State of Missouri is very progressive in a great many particulars, but unfortunately, up to this time, owing to peculiar circumstances, the food department has not had a chemist at its command. The law provides that the chemist of the experiment station shall be the chemist of the department, but hitherto the latter has been overworked and could not do the work of the department. The consequence has been that whenever chemical work has to be done for the department, if the city chemists of the several cities in the state do not do the work without compensation, it is not done. Fortunately, the city chemists of the several large cities in Missouri have courteously coöperated with the state department to the extent that whenever the inspection took place in the city, the city chemist did the work for the state department. In some instances the city chemist has been kind enough to do the work in the territory adjoining the city. Even if the state had had a laboratory of its own to do all of this work, it could not have accomplished half as much good, for the reason that the local chemist being always on the ground, is at once available to take charge of an analysis and is always quickly available with little expense in court cases.

Some time since, an inspector of the Missouri department read in the evening paper that a child had died from ptomaine poisoning, which was attributed to a package of rolled oats. The address was given. The inspector got on the car and went out to the place. He secured the package of oats, learned that the package had been found upon a window sill outside of the house, and the child had brought the same to the mother. The oats were cooked and eaten; shortly after, the child was taken violently ill and died. The package was taken at once to the city chemist, who, on making a careful examination, reported that the oats had been poisoned with arsenic. By the time this report was made, the remains had been interred on a certificate by the physician as having died from ptomaine poisoning. As soon as the chemist's report had come to the inspector, notification was given of the result, the body was exhumed and arsenic was found in the viscera. Suffice it, that the supposed guilty party is now under arrest. The point I desire to make in relating this incident is that if it had been necessary to send the oats to Columbia or somewhere else, an examination made and a report sent back, a large amount of time would have been consumed, and possibly the guilty would not have been apprehended. Also, a large expense would have been entailed to have gotten the state chemist to the city when the case came up for prosecution.

In not a few instances the local health inspectors of the city have called the attention of the department to violations of the law which they seemed unable to abate. This had led to some successful prosecutions with jail sentences,

which could not have been had under the city laws. This is especially so in sanitary inspection. Again, where politics play a large part in the hiring of local inspectors and the local department hesitates to go the limit, the state department can be called upon for effective results. There is a tendency, however, on the part of local officials, to lean rather too heavily on the state department. This is especially so where local influence may be brought to bear for the protection of some violator.

Even if the state has an elaborate laboratory equipment with several chemists at a given point, I think it is very desirable that the state control have the advantage of local assistance, especially in the chemical department. One important feature of local inspection is that it can have laws passed under the several city charters which cannot be passed by the state. For example, in Missouri there is no law requiring dairy cattle to be inspected for tuberculosis; nor do I believe it possible for such a law ever to be passed, but there is nothing to hinder a city from passing a law forbidding the sale of milk within its municipal bounds, until the cows producing the same have been inspected for tuberculosis and a certificate setting forth the same being furnished.

The Missouri Food Inspection Department has interested itself and drawn up an ordinance which has been passed by seven different towns which has the above requirement. An inspector of the department visits a city and endeavors to stir up interest in the matter of milk and food inspection; the commissioner frequently is invited to deliver an address to the commercial club of that city, and, by using the newspapers, a sufficient interest is aroused to pass the ordinance. Just before the passage of the ordinance an inspector makes a detailed inspection of the dairies and all food purveying establishments, publishing the scores of the same in the local papers. The result is that the people are aroused and insist that the council pass the ordinance. At certain intervals the state department, having especial interest in these towns, sends an inspector to keep up the interest. The result has been that a splendid cleaning up has taken place in many of the larger cities outside of St. Louis and Kansas City.

An ideal condition would be cordial coöperation between the local and state food controls. Unfortunately, as has been suggested above, political conditions enter very largely into the situation, especially of the state and local authorities are of opposite political faith. It is an unfortunate fact that either one or the other are jealous of the publicity which is received, or of the possible advantage which one party or the other might receive through publicity.

I do not believe that the best results in coöperation can be had until all the food officials can be placed under civil service, and so be exempt from political influence. Of course, the personal equation would naturally enter into the matter in any event. I am discussing this question from the standpoint of its problems, and am free to say that I am not sure just as to how proper conditions may be best brought about, except that I am very certain that the consumer would get the best service by having the local and state food controls cordially coöperating, and I am glad to say that in Missouri very little friction has been had as between the two departments.

Under our laws, the state department is dependent upon the county attorney of each county to prosecute offenders. Here, again, the element of politics is permitted to complicate matters, as it is very frequently found that the local prosecutor is seemingly afraid to make prosecution, for fear that he will offend some of his constituents, especially if they had some special influence, overlooking the fact that all of his constituents are consumers who would naturally prefer protection. My opinion is that in the matter of prosecution, the state should be furnished a prosecutor who could prosecute in each county, if best results are to be had.

In one instance, the local authorities in the matter of milk inspection have insisted that the state department keep out and confine itself to the country inspection of milk supplying the city. In another instance, the state department in order to get quick action has found it necessary to bring cases in the local police court where a judge was on the bench who seemed to appreciate the necessity for quick action which could not be had in the state courts. The result has been very beneficial, especially in milk cases. In another city, however, the local authorities are using the state laws for prosecution in the state courts on the theory that the police judge is not sufficiently severe and the possibility of a jail sentence which is not possible in the city court is a deterrent to the offender. In one instance, also,

the local officer insisted that the inspectors for the state should be placed under his direction, as he alone knew who the offenders were. His reason for this attitude could probably be surmised. Of course, the state could not permit any such kind of coöperation.

One great difficulty as I see it in the coöperation between local and state food controls is the same as that which exists between government and state food controls. Each department seems to consider itself of more importance than the other and is constantly fencing for advantage.

Recently the Food Department of Missouri endeavored to arrange for coöperation between the federal and state departments to make some special investigations. Under instructions from the department at Washington I sent an inspector to call on the federal inspection, but the latter was so assured of his own importance that he would have nothing to do with anybody but the commissioner. As the commissioner is in that particular city about once a month, and as whenever he called on the federal man the latter was out



WILLIAM P. CUTLER, M. D.,
Food and Drug Commissioner of Missouri.

of the city, several months have passed in an effort to get coöperation without result.

While this exact condition does not obtain as between the state and local food controls, it exists in other ways. There is no doubt in my mind but that the local officers are in much better position, if they have a food law, to enforce it with greater ease than have the state authorities. The fact is that if the local people would act as promptly as might be, with courage and regardless of what influence might be brought to bear, the state officials would have more time to give attention to the country places where municipal legislation is not possible. As it is now, two-thirds of the time of the inspectors is taken up in the cities. For my part, I would be only too glad to turn over the inspection of foods to the local authorities, if they would give it the proper attention.

One city in Missouri has a food law modeled after the state and national law, which are the same. The effect of this, if enforced, is to bring about the very best coöperation between the state and local food controls. I am very sure that if all the larger cities in the state would pass a local food law similar to the state law, that the work of inspection would go forward with much better success, and the state authorities would be in a better position to look after the work of the country, coöperating wherever possible, with the local people.

There is no doubt but what there is a very decided necessity for coöperation between the state and local food controls, largely for the reason that it augments the inspection force, and this would be especially so if the local and food laws were similar.

The President: Gentlemen, you have heard the paper; it is open for discussion. Mr. Strode of Ohio is not present, so a general discussion should be had.

Dr. Caspari of Maryland: I want to say a few words as to the conditions that prevail in Maryland. I am glad to say in our state we enjoy very satisfactory, and very beneficial coöperation between the state, municipal and federal authorities. Dr. Hedrick, the representative of the government, representing the dairy or animal industry, has always been ready to coöperate. The City Board of Health of Baltimore has been more than willing to coöperate, and we have derived an immense benefit from the coöperation of the three branches. In fact, we avoid conflicts which might otherwise occur as Dr. Cutler has mentioned. There is no disposition on the part of the city officials to antagonize the State authorities, but before action is taken a phone message is sent from my office to Dr. Bosley or from Dr. Bosley's office to mine, and where this coöperation can be secured, it will be found to be of great advantage to both parties. In Baltimore it has twelve milk inspectors that relieve me from looking after that. Nobody is permitted to sell milk in Baltimore without a license, and this is painted on the wagon, and a test is made by our chemists. In addition, we have an inspector in our state who devotes his whole attention to cattle, sheep and hogs, so that my experience has been extremely pleasant and satisfactory, derived from a mutual coöperation between the three departments.

Mr. Judd of Oregon: That the coöperation between the city health department and the state should be complete is almost a self-evident fact. Sometimes, unfortunately, there is a little jealousy between them. It seems to me that the city people are a little more inclined to be jealous of the state people than the state people are of the city people.

In order to coöperate and get better results, why wouldn't this be a good and practical idea? Now the city people investigate the milk, and inspect it just as soon as it gets in the city limits, and can do things to the milk men there in the city limits, but cannot get service on the man as long as he remains outside of the city. They do not have power to inspect his milk for dirt and all that sort of thing. Here is the thing: Why wouldn't it be a good thing for the city to ask the state to deputize their inspectors so that the city deputy may also be a state deputy, and then if he finds someone should take a trip out of the city in the county, he can do it without calling in the state, and it seems to me that the service would be better. The official in butting around finds the milk coming from a certain vicinity is adulterated by water, or by the addition of too much dirt. He can dump that milk, but that is about as far as he can go, and then he comes to our office, and wants us to go out there and do things, and sometimes we do not happen to have a man available, when, if this city man is deputized by the state commissioner, he could go right out there, and it seems to me he is in a better position to do that than the state man, who, up to this time, had heard nothing about the case.

Mr. Davies of Washington: In this state there is perfect coöperation existing between the state and municipal authorities. Regarding the idea suggested by Mr. Judd, of authorizing city inspectors to do work outside, this state has had that in force for some three or four years. Nearly all the cities in this state have municipal inspectors, who are authorized as city deputies to work outside. They are not working on a salary received from the state, but it is received from the city. In the large cities, for instance, Seattle, which has three or four times as many as in the department itself, it is done under the supervision of the state, and with the coöperation of the state the system has worked out well in this state.

Dr. Jaffa of California: I might add to what Mr. Davies has said, that we have been carrying on such a policy only for a few months, that is, giving the city deputies power to

do state work, but the state pays no salary. They just have the power and authority, under the city, to do their work, and the city pays their salary. There is another point I would like to bring out, and get information on, and that is, if the funds for the state are limited, which is the better course to carry out, leave the cities alone to work out their own salvation, and devote the funds to enforce and do their work in the city, and not in the interior. That is the matter that is bothering us, and we have started out by leaving the city alone, and using the funds in the interior where there are no funds for that work. I would like to know what others have done in that direction.

Mr. Potter of Connecticut: Perhaps it would be of interest to the members of the Association to explain as briefly as possible what we are doing in Connecticut. We have local city milk inspectors in all the cities; I think every city in the state has one or more local milk inspectors. The country towns or boroughs, places from one to ten thousand inhabitants having no local milk inspectors, hire men from the funds which are available for this work in the state department, which would be impossible to thoroughly inspect the milk supply of the state. The department has coöperated with the health departments throughout the state, and the local health officers in towns where there are no local milk inspectors have agreed to take up this work of inspection and gather samples of milk in their own locality, sending those samples to the state bacteriologist for examination, and the state bacteriologist then notifies the food department when any excessive amount of bacteria is found in the milk, or when any adulteration is found. Then the department takes steps toward getting evidence to convict and the guilty parties are brought into court, and I think, in every instance, every single case that has been brought, a conviction has been accomplished. As far as the cities are concerned, the city milk inspectors have asked me to coöperate with them in so far as an examination of the milk produced outside of the city or town limits are concerned, and a lot of work had been done harmoniously in that way. I do not know that this rambling explanation is of any interest to the commissioners here present, but I thought it might be.

Mr. Judd of Oregon: I just want to say a few words as to whether or not we should leave these large cities to themselves, and devote more time to the interior. Now, we can't do that very well. The city of Portland pays about a third of the taxes of the state, and for which we are certainly entitled to some protection from the State Dairy and Food Commissioner's office. Now, the gentlemen from Connecticut when it comes to the interior, if the city health officers write to us, we go and inspect their foods. And I, in reply, go myself into the smaller towns of five, six, seven, eight, nine or ten hundred inhabitants, and the probabilities are that they do not have anyone employed to inspect the milk. It will be turned over to a policeman, or someone of that kind, and we find out there is a half dozen or more bacteria in the milk, and that is not nearly all; we like to go to these towns for the purpose of finding them, and having a good heart to heart talk with them, and show them where they can make this improvement and that improvement, and why they should.

Mr. Whitaker: The answer must depend on local conditions. The city of Boston has a very desirable local milk inspection, and it would be almost impossible to duplicate what is being done there, while it would not be if conditions were different there. So the question depends largely on the conditions existing locally.

The Chairman: Is there further discussion? If not, we will proceed with the program. While Dr. Barnard is out, I would suggest that we take up any miscellaneous business, and if there is any miscellaneous business to be offered, it is now in order.

Mr. Davies of Washington: I will say arrangements have been made to meet down town at the same place we met last night, and it will not be necessary to come up here.

Dr. Crumbine of Kansas: The Committee on Coöperation was somewhat disappointed during the past year, on account of the lack of coöperation in the commissioners in carrying out the committee's plan, and I bring this up at this time, Mr. Chairman, for the purpose of perhaps a discussion as to what is wrong with the committee's plan if it is wrong, and why there has not been a more hearty response on behalf of the commissioners in carrying out the plans of the Committee on Coöperation. It is just a suggestion.

The President: Gentlemen, I see Dr. Barnard has come in. We have quite a lot of work, and we have sandwiched these matters. If there is any suggestion, I want it made. If not,

I think it will do us good to talk about what Dr. Crumbine has suggested.

Dr. Barnard's paper will now be heard, if there is no objection.

SHOULD LAWS GOVERNING FOOD SANITATION BE ENFORCED BY FOOD AND DRUG CONTROLS OR BY OTHER BODIES?

By H. E. Barnard.

The history of the regulation of the food supply in this country, although short, is full of interest. The work from the time of its inception in Massachusetts in 1882 to the present day has been a story of constructive progress, beginning with attempts to regulate the composition of milk and the sale of adulterated butter and continuing through the various stages of development of standards of composition and specifications for branding and labeling to this moment when the necessity for the suppression of fraud has, in a large measure, passed. The work, first corrective rather than restrictive, has now become largely regulative, and the food official finds his greatest opportunity, not in prosecuting dealers who handle adulterated goods, but at the factory and distributing point where conditions obtain incompatible with our modern ideas of food sanitation. As I have before said in this organization, food adulteration is no longer a question of fraud to be suppressed by police methods; it is a problem for the sanitarian.

I have said that pure food work originated in this country in 1882, thirty years ago. There was, of course, desultory legislation, corrective in character, prior to that time, and many cities long before then were doing something for the protection of the consumer. Beginning with the Massachusetts law, the enforcement of which was entrusted to the State Board of Health, for the next twenty years food legislation was a series of experiments. In some states, especially the states largely agricultural, it became necessary to protect and build up the dairy interests. This was done through Departments of Agriculture and later necessitated the appointment of a special official or dairy commissioner whose duty it was not only to educate the dairymen, but to regulate the sale of dairy products, and especially to restrict the sale of oleomargarine to its proper lines. This was the only pure food work then attempted, but naturally enough where such a machine was already in operation later food legislation made the dairy commissioner responsible for law enforcement. So it came that in many of the states we today have a dairy and food commissioner equipped with all the paraphernalia necessary to enforcement of pure food laws, at least insofar as those laws are intended to prevent sophistication and fraud.

But within the last few years and especially since the passage of the sanitary laws drafted and advocated by this Association, the question of food sanitation has become a paramount issue. Today, in more than one state, violation of the laws for sanitation are held more worthy of punishment than the infraction of earlier food legislation. These sanitary laws are well designed, their scope is far-reaching, their effectiveness has been amply demonstrated, their constitutionality is unquestioned. But we have not gone the whole road, even as the way is provided in the law.

Read the section in your sanitary food law regulating the employment of diseased persons. Does it not say, "No employer shall permit any person to work, nor shall any person work in a place used for the production or handling of foods who is affected with infectious or contagious diseases, such as diphtheria, scarlet fever, consumption, typhoid fever, venereal diseases," etc.? What is being done at the present time in the way of enforcing this section? In an endeavor to find out how much has been accomplished under this most desirable section of the sanitary law letters of inquiry have been sent to the health officers and food commissioners of all the states and to the health officers of all the cities of this country having over 50,000 population. The replies which have been received are significant. In not a single case is a state giving attention to this all important problem and in only one or two cases out of the seventy or more cities answering my inquiries is especial attention given to the health of employes in food establishments. Occasionally health officers report having sent home persons obviously suffering from consumption, but in general little more attention is paid to the health of the baker, butcher, confectioner or grocer than to the employe of a foundry or a shoe shop. Splendid progress has been made in protecting the employe, and his work-room must be properly lighted and

ventilated; the gears of the machine he operates must be equipped with guards; the dust and fumes he makes at his work must be removed by suction. This is right. The health and life of these employes is too sacred and too valuable to neglect. Is it not high time we took the next step and saw to it that our laws which prohibit the employment of diseased persons in food factories are equally well enforced?

We have factory inspectors for the benefit of the operative. We should have a sanitary inspection sufficiently adequate to protect the consumer. I believe this Association should not let the opportunity pass to go on record as in favor of a requirement of a certificate of health from every operative who has anything to do with the handling of food products during process of manufacture or distribution, when these start a movement which will eventually result in the acceptance of our doctrine of personal responsibility by every employer, and the recognition of the principle. "The duty of the manufacturer or distributor to the consumer is paramount to any business necessity." Is it asking too much to say to the baker applying for employment, "Show me your certificate of good health?" Is it an improper demand of the girl who dips chocolates in a candy factory or packs crackers in a carton to require that she satisfy the foreman in charge of the room that she is clean and healthy? Is it too great a violation of the vaunted rights of a citizen to do as he pleases without regard to his neighbor to insist that the grocer's boy is morally clean and bodily sound? Would not the service at the restaurant where we take our lunch be more satisfying if we were as sure the hands of the cook and waiter were free from disease carrying bacteria as we are that the butter is not olemargarine and the maple syrup is a product of the sample tree?

Not long ago we traced a case of typhoid infection past the water supply, past the fly nuisance, past the possibility of infection by contact, back to the farmer who supplied butter to the family. We found a case of typhoid fever at that farm house and the butter maker herself suffering from the disease. Is it not high time that the food officials, whether he be health officer, sanitarian or dairy commissioner, takes full cognizance of the fact that that farmer should be made personally responsible for the transmission of the disease in his home to the family of a consumer? I visited a dairy lunch room a short time ago and found there a waiter with a face stamped with the damnable trail of syphilis. Within the last three months we have compelled a public service corporation supplying water to a community to install a purification plant to remove the sewage bacteria which for years had visited upon that community a typhoid mortality of over a hundred.

Such conditions as those, continually forced upon our attention, makes me sometimes question whether the money expended in pure food work is being utilized to best advantage and whether in our zeal for proper labeling and the correction of practice of economic fraud we have not lost sight of even more vital problems.

I hold the work of regulation and control but half done when attention is given to the use of proper materials and the vastly more important sanitary supervision is neglected.

We all admit that it is infinitely more important that the milk supply should be clean than it is that it contain a definite amount of butter fat. We recognize the fact that diseased meat is far more dangerous to the consuming public than a sale of smoked shoulder as a picnic ham; indeed, the veal of earlier days which masqueraded on our table as potted chicken, although it deceived and defrauded us, did us no injury if the ingredients of the can were made from sound material and were properly sterilized. Consider the baker. It is of interest to the food commissioner that he uses unbleached flour, that his sweetening agent is sugar instead of saccharin, that his baking powder is properly labeled, that his jelly roll is true to name, that he does not simulate richness in his cakes by using coal tar colors instead of eggs. It is of interest to the health officer or sanitarian that his bakery is clean and sanitary, that his water supply is pure, that the materials he uses are sound and wholesome, that his bakers are trained in the ways of cleanliness, that they appreciate the value and necessity of soap and water as cleansing agents, that they are sound, healthy men, unafflicted with tuberculosis or venereal diseases and come from homes not invaded by scarlet fever or diphtheria, that the products of the baker's even are handled in a cleanly manner and that on the long road between the bakeshop and the consumer they are kept out of contact with the dust of the street and the dirty hands of the driver.

Coincident with the development of food legislation has been the upbuilding of powerful organizations for the protection of the public health and the suppression of disease. It is but natural that the food official and health officer, traversing as they have paths so nearly parallel, have found their work conflicting, never to the point of antagonism, but frequently depriving it of its proper value and hindering its best development. This tendency to duplication of machinery and purposes must be avoided. It is expensive, unproductive and unscientific.

It has become evident that the health officer, with his broad training along sanitary lines, is better equipped to carry forward the work than agricultural boards or inspectors with little or no training in this particular field. There is such a thing as sanitary science, a new science not yet fully understood, certainly not appreciated by the masses. Modern medicine points the way to us today when it endeavors to prevent disease rather than to cure the ills of mankind. The food commissioner, to my mind, should be similarly busy in the prevention of law violation rather than in the punishment of offenders, and so is it necessary that our department be equipped with men and machinery to do this successfully. The day when an untrained man, politically appointed for services rendered in his ward or county, can do the work of a food inspector, if it ever existed, has passed.

It is manifestly impossible for the food inspector, trained perhaps in the reading of labels and the collection of samples for analysis, properly to handle the large subject of sanitation. How can he determine what proper cleanliness is if he does not know bacteria and moulds? How can he exact the employment of healthy men if he is not familiar with the aspect of tuberculosis? How can he assist in the suppression of the so-called social diseases unless he appreciates perfectly their horrors? What means to him the prevalence of scarlet fever in the home of the baker unless he understands how this dread disease of childhood is transmitted?

I do not advocate the destruction of the organization in control of food work in the various states. To do so would be to fail to recognize the splendid work which has been done throughout the country, and to depreciate the value of the services the food commissioners of this and other days have given their states. But I do honestly think that the work of the future cannot be effectively and efficiently done unless the food commissioner and the health official work side by side.

The President: The discussion upon this most important subject will be opened, I understand, by Mr. Davies, if he is in the room.

Mr. Davies of Washington: Mr. President and Gentlemen: I asked Dr. Barnard to suggest a few points that he was going to bring out, and he very kindly sent me his paper, and I have prepared a short paper in opening this discussion. I trust I will not get into trouble, because I was talking with our State Health Commissioner, and he said he was coming out to hear this discussion and he is as good as his word, and has come to hear the discussion.

To hear any discussion of the food sanitation question from Dr. Barnard is always an education, for we recognize the advance stand taken by the State of Indiana upon this work. With what the speaker has said it would seem we must in the main agree; the necessity of legislation authorizing, regulating and enlarging food sanitation work being too apparent for contradiction. Exception, if any, must be taken to the views expressed as to the proper persons or departments to be empowered with its enforcement.

The phrase "food sanitation" is a comprehensive one. We must not attempt to restrict legislation covering this work to locality or to special branches of food work, but make it cover the whole food industry from preparing, bottling and selling the small bottles of extract to catching and handling the mighty halibut; from baking and handling the loaf of bread to the killing of hundreds of head of stock per day in our packing houses; from picking and canning our small berries to the largest milling industries, including the health of all operatives therein.

If I may give my few remarks something of a local coloring, I trust you will bear with it, for the matter of food sanitation legislation, or more correctly speaking, the necessity for food sanitation legislation, is a very live question here now, both state and municipal. Following action taken by this Association at the Macinac convention, a bill was introduced into the legislature of Washington. It failed to pass. Again before the succeeding legislative session it was introduced, but again political fortune decreed that it fail. It was not defeated either time, simply did not come to a vote. Since then, a number of our cities have passed

ordinances following closely this Association's proposed act as passed in several states, and much good has come therefrom, although the work accomplished has covered strict sanitation rather than the health of those employed in the work. Very recently the Health Commissioner of Seattle caused to be introduced before the local council an ordinance very thoroughly covering the food sanitation work in the city. This ordinance has met with strong opposition, but some of the press opposing the passage of the state act two years ago were advocating the passage of the ordinance, and I am pleased to say that there is a good prospect of its becoming a city law. The discussions here and the influence of this convention will, I trust, assist the Health Commissioner in his good work.

As the cities in the state have taken the lead in legislation covering the subject, it is to be hoped the state legislature will follow and enact a law closely in harmony with city ordinances that the work may be carried on by state and city officials as it should be, in a spirit of complete coöperation.

The need for sanitation is as great in the small towns as in the large cities. The fruit displayed in the country store is as apt to be within the easy reach of the fly and of the large dog as is the fruit and meat in the city markets; the health of the baby in the smaller towns is as important as the health of those in the larger cities, and these smaller cities and towns, lumber and mining camps, and railroad construction camps must be reached through a general state law. Again, as Dr. Barnard has stated, more attention should at once be given the health and cleanliness of the surroundings as furnished by the employer. Are you aware, Mr. President and members, that in sections of our country, hops, berries and other fruits are picked to a large extent by Indians, who gather where the work is and go into camp, remaining about for weeks at a time? What protection now has the consumer against contamination of the fruits from disgustingly unsanitary conditions usually surrounding such a camp? Or what protection has he from the loathsome social diseases with which so many Indians are afflicted? This is no picture of the imagination; neither is it as to the conditions sometimes found in the small slaughter houses over the country. Many of you have seen these places: usually a large corral full of hogs close to the slaughter bed so as to catch the blood as it flows from the animals being killed, the corral being full of old bones that have been accumulating perhaps for years; frequently a contaminated water supply in which the fresh meat is washed; no protection from flies and dirt; very little attention paid to cleaning up after killing, and still more disgusting, remove a board or kick aside a little clotted blood on the floor, and out will crawl maggots large enough for fish bait. Not all slaughter houses were or are this way, but some are. This department, without a special sanitary food law, has given this what attention it could, and many such places have been permanently closed and new killing places built.

Under whose jurisdiction should the enforcement of such laws be placed? In cities the enforcement of food and dairy ordinances are almost universally under the boards of health of the respective municipalities and naturally a sanitary food ordinance would be enforced by the same authorities; but I believe a state sanitary food law should always be enforced by the same body having the food and drug control; if that body be a board of health, then it should control food and sanitation; if that body be an Agricultural Experiment Station, food sanitation should likewise be under the station; if the food and drug control body be a dairy and food department, that department should be empowered to enforce all sanitary food laws and regulations. Why?

First, because it makes no difference who has the food and dairy control work, every assistant should be appointed for his practical and expert knowledge of the subject in hand, not for any political pull. This, we appreciate, is not always done. And what I say now I ask that no one present take as personal, for it is not, neither does it apply to local city conditions, but I know of other departments than Dairy and Food Departments whose sanitary inspectors are appointed from political pull, not from their knowledge as sanitarians. As the first speaker has said, these men should be educated sanitarians able to apply expert knowledge to the health of food manufacturing and food handling employees. This class of man can as well be delegated to the work by the department in control of food work as the party in control of sanitation can delegate expert dairymen to attend to dairy education and inspection. It is the kind of man you put to work more than the department under which the work is placed.

Second, because the food sanitation work carried on by the same department as the food and dairy work can be

done as efficiently and with substantial financial saving to the state. Food inspectors can remedy many sanitary irregularities in their regular food work, saving duplicate trips. They can report to the expert when such expert's trips are necessary, and provision can be made in the law for the calling in by the sanitary food inspector, if need be, in case of disease, the local health officer.

It is presumed that no one will question Dr. Barnard's premise that cleanliness of factories, healthfulness of employes, wholesomeness of raw products manufactured into foods, protection of those from dust and flies is much more important than detecting technical violations of labeling and the like. Not long ago we discovered a bakery operated in a small, dark, ill ventilated room opening direct into a toilet room without tight doors between. Sacks of flour were piled up in one corner and on these the baker made his bed. Technically, there is no law in this state by which this man could be reached, yet we took cognizance of it, and succeeded in abating a continuance of such conditions. We were enabled to find this through our regular food work, an added fact favoring jurisdiction by food control officials, and we feel that we did the consuming public a much greater service than had we spent the same time and energy in ascertaining whether the baking power used by the baker had 9½ or full 10 per cent of available carbon dioxide, and whether the baking powder was properly labeled as to its contents.

In conclusion I leave this question to you: After all said, isn't it of much greater importance that the department having jurisdiction of this work, whether it be health board, experiment station or food, dairy and drug control official, appoint assistants morally and physically sound and practically and technically competent for their particular work, than that any one of the above departments be favored if the appointees thereof are to be chosen because of some special ward heeling, political work? (Applause.)

Mr. Flanders of New York: I would like to ask a question of Dr. Barnard. The State Sanitary Engineer was somewhat of an unknown quantity. Does he know whether or not the sanitary engineer is qualified to pass on the disease, or would it take an expert from another field?

Dr. Barnard of Indiana: In answer, I think Mr. Flanders his misunderstood me. I do not refer to sanitary engineers, but sanitary experts. They travel a different course. I do not mean a man has, necessarily, to take a course in medicine to be a sanitary expert. I think there are men in this country who understand sanitation better than men who have taken a four years' course in medicine, and it is not necessary that they should be "M. D's." but trained sanitarians.

Mr. Flanders of New York: In our state the factories producing butter and cheese and milk, we have inspected them annually or many times during the year, to determine what the conditions are surrounding them, as to whether or not they are inimical to the health of the public, and we find difficulty in finding men who can go into court and substantiate what is being done. We can't get many men who will say it is an inimical condition. I find it is very difficult to get a chemist to swear that he can tell by the smell. Are they educated sanitarians, or sanitary engineers, or whatever they may be, that can take up this question and be helpful?

Dr. Jaffa of California: I would like to say in the University of California we are opening up just such a department for men and women to be employed in the Department of Public Health, who take the degree of "Doctor of Public Health," and they are eminently fitted to do such work, although they are not trained physicians.

Mr. Flanders of New York: Are they qualified to pass on the infectious conditions—infectious or contagious diseases?

Mr. Jaffa of California: I think they are. They have pretty good training right there.

Mr. Emery of Wisconsin: I would like to ask Dr. Barnard if he intends by his paper to convey the idea that the state should assume the responsibility for the sanitary conditions at factories where food is prepared for shipment by interstate commerce.

Dr. Barnard of Indiana: I had hoped some commissioner would introduce a resolution asking for an amendment to the Federal food laws, so that the Federal inspectors might handle that proposition, which they are well equipped to do, but not permitted to do under the present laws. In Indiana we are not half as much interested in the health of the citizens of Ohio as we are in the health of our own citizens. I might say, Mr. Flanders, supplementing Dr. Jaffa, most of our medical schools are instituting a department for sanitary inspectors, and in a few years it will not be difficult to find the right kind of people for this kind of work.

Mr. Flanders of New York: Now, it may be difficult, perhaps, to find a way for the national Government to take on police powers. You have raised a problem that is very difficult. Take the State of New York, which has one city with a population of four and one-half million, how are we to start, or take charge? What would be your suggestion?

Mr. Crumline of Kansas: My own personal judgment is that this is the most important matter brought up before the Association thus far. So deeply are we impressed in Kansas with the importance of the matter that our inspectors have instructions that there is no longer any excuse for anybody to be unclean in their place of business, and without any further preliminaries, without waiting to report to the department, they are to follow our plans. Although the shops have been inspected time and again, the day of grace has ceased where people can conduct dirty, filthy places. Now, the question of the disease, of people handling food products is a tremendously important one. Particularly is that true of tuberculosis, and we recently in our state, I might say, have had some rather appalling experiences. We have undertaken and just completed, indeed, an inspection for tuberculosis in ten cities of the first class in our state by a trained physician and sanitarian, and the revelation has been somewhat appalling, and I will mention a few concrete samples to show the bearing this has on the matter of food supplies.

In one place we found a girl dipping chocolates, hand dipped chocolates that go to the consumer, of course, in an unsterilized condition. In three different cases we found advanced stages, two men and one woman, were cooks in restaurants, in all, they were throwing off bacilla. In a certain packing plant we found five cases of tuberculosis picking chickens. In the month of March there was five cases of tuberculosis in food producing establishments. In another instance a little candy shop was started by a man and his wife was in an advanced stage of tuberculosis, making taffy in an important town, and the woman was seen coming out to wait on our inspector, holding her hand over her mouth, thinking he was a customer, where she had been pulling taffy in the kitchen just before.

This is a class of work that cannot be done by the food control officials. You must cooperate with your state board of health in doing that sort of work. That has led up to action, requiring examinations, not all, but certain classes we intend to include, requiring physical examination at stated intervals twice a year for tuberculosis, and that action is based on the social and industrial conditions in general.

In another case, we find ten Mexicans in a windowless box car suffering from tuberculosis. The condition was appalling, and Dr. Barnard has called our attention to one of the most important matters of food control we have in this country today. What is the matter of placing labels or dodging our tactics as compared with the life and health of the public, and I trust those commissioners who are not connected with the department of health will speedily take that matter up and get cooperation.

The President: Gentlemen, Mr. Davies has told us we have with us Dr. Kelly, and I think he can make suggestions to us, and I wish to introduce Dr. Kelly for a very short talk.

Dr. Kelly: I am very much interested in just hearing Dr. Crumline's remarks as to the importance of sanitary control of workmen in food shops. In this state, like most states, our work has developed altogether along independent lines. I do not feel there has been very much, there has been a little direct friction, but I have always felt there has been a very lamentable lack of cooperation between the two departments that seems to be beyond our control, but I feel strongly on this point that we are going to have a consensus of boards of health or rather that every state in the Union has to work to become more automatic in cooperation than the condition we have at the present time. That would probably be something every state would have to solve for itself, in states like Kansas, California and other states. In Montana, it has already been solved. When you come to practical application, I am familiar with the food work, but Mr. Davies is not particular familiar with the health work. We have to have our matters so adjusted that we can use the same inspectors in the field. When it comes to the matter of disease, I agree with Dr. Crumline. When the State Board of Health meets, we have a number of rules and resolutions to present regarding the prohibition of the employment of individuals suffering from these diseases in any place where this food is produced. We can raise that question and it may become statutory, but the enforcement must rest with the local health office and Mr. Davies. We have one sanitary inspector in this state. Sometimes I feel that

is one of the reasons that each state has to solve their own problems. The way the facilities for coming to the study makes our work on individual lines.

A few months ago Mr. Wallis from Idaho was telling me how they carried out the enforcement of it in that state, and I think it would be well to hear from him. In just a few states like Mr. Crumline's and Massachusetts, the health board must of necessity get a great deal of information to direct matters. We are, strictly speaking, using the same man in the field and the two heads are working together. (Applause.)

Mr. Wallis of Idaho: In as much as Dr. Kelly has mentioned Idaho, I would state that we have the ablest cooperation between the State Board of Health and the Food Department in Idaho. We have a very magnificent appropriation from the state. Whenever we want a regulation adopted by the State Board of Health I have only to request the State Board of Health to meet and pass such a regulation, and when such a regulation is passed and adopted and published, it then becomes the law of our state. We have the power, under our statute, and we have been able to exercise the most rigid inspection of sanitation in connection with our food work. We have had over 500 convictions the last twelve months for a violation of our laws—successful convictions—and we are quite severe and give this feature of our work the greatest attention. We have the most effective laws in the United States. It is a violation of law to sell any meat in the State of Idaho that hasn't come from the inspected slaughter houses. You cannot go into the State of Idaho and find anything like Mr. Davies has mentioned. If a man had his bed on sacks of flour, we wouldn't wait, we would go into court and we would not wait to go into court to call it adulterated food. It is a violation in our state to expose foodstuffs on the sidewalk. You will not find the sidewalks displaying food. Another thing, we do not allow to be sold a chicken in Idaho unless it is drawn, and we do not have to take it into the laboratory.

The President: As Mr. Wallis stated, in a little town in his state, my attention was called to the fact that one of his inspectors had caused a livery stable to be removed. That was the first thing of the kind I ever heard about.

A Delegate from Massachusetts: The Massachusetts state law against adulterated milk is very concise, merely prohibiting the sale of milk to which water or any foreign substance has been added. A milk dealer was recently found selling milk which had considerable sediment in the bottom of the bottle. He was brought into court, charged with selling adulterated milk, to-wit, milk to which a foreign substance had been added. The case was fought out in the lower court, and subsequently on appeal to the Supreme Court over the question of whether or not dirt in milk is a foreign substance. The Supreme Court decided that it is. The sediment in the milk was cow manure, scales and hairs.

The President: Dr. Barnard will close the discussion.

Dr. Barnard of Indiana: Mr. President, in Indiana we have a force of inspectors working from the State House doing this sanitary work. Fortunately, we also have 700 deputy sanitary inspectors. These 700 men are the health officers of the state, and they furnish us an admirable means by which we can enforce the laws, but I recognize the fact in the great State of New York, and all over the country, we never can do our work satisfactorily and completely by means of inspectors. We must develop in the mind of the manufacturer this idea: That it is not only a violation of the law, but an offense against common decency to employ in an establishment a man who is suffering from consumption or syphilis or gonorrhea or any one of those other contagious diseases. We have gone a long way in Indiana. In the last two weeks the manager of the Claypool Hotel, the largest hotel in the state, has employed a house physician, and he requires that anyone who has anything to do with the culinary department or barber shop has to submit to a complete physical inspection every two weeks. He was asked what would happen if his French chef was suffering from disease, and he said, "The chef will have to go, and we will get a clean man." It is only a little while before the baker will refrain from employing a man suffering from a contagious disease, and it is only a little while before the girls working in our candy factories will be clean morally.

My attention was called recently at a meeting at Indianapolis of the City Board of Health that this Board of Health has been administering the 606th treatment for syphilis. It is expensive and the board did not think it could be carried on. The physician urged it should be carried on, and cited in support of his contention that he had recently ad-

ministered the treatment to two waiters, a cook and a candy dipper and he says, "We are cleaning them up by curing them." We ought to clean them up, and we can only do it by making the employers require an examination. If it is in order, I would like to read for your consideration this resolution; my idea of getting at it.

"Recognizing the danger of the spread of disease by the medium of the food supply, and appreciating the fact that the passage of well designed sanitary laws, as furnishing adequate means by which eliminate persons suffering from syphilis, gonorrhea and consumption and other contagious diseases from the ranks of food handlers, this Association urges the rigid enforcement of such legislation, and the development of a practice of physical inspection that will insure sound, healthy workers with the food supply."

The President: The hour for adjournment is near. Is there any further miscellaneous business? If not, the Chair desires to state, as provided last evening, the night session will be held at the same place at which it was held last night, beginning at eight o'clock sharp. The Chair desires to call further attention to the fact that there is only one paper scheduled for this evening, and the election of officers will come up, and we wish to start very promptly. If there is no further business, we might as well consider ourselves adjourned.

(Whereupon adjournment was taken.)

THURSDAY, JULY 11, 1912.

Evening Session, 8:00 O'clock.

The President: Gentlemen, the house will please be in order. The first order of business is a paper on a subject which I believe we will all concede as being exceedingly important. That is to say, all of us who have to do with legislatures. That is, "The Best Methods of Securing Needed Legislation," by Hon. R. M. Allen of Kentucky.

[Mr. Allen's paper will be reproduced in the August number of the AMERICAN FOOD JOURNAL.]

The President: Gentlemen, we can give a few minutes for discussion of this important subject. Dr. De Barr, of Oklahoma, is scheduled to open the discussion upon it.

Mr. De Barr of Oklahoma: Mr. President, and Delegates: I have not prepared a paper on this subject, but I have some thoughts to offer. There are two kinds of laws, good and bad, and, of course, in the enforcement of food laws, we need but the good laws, and we must first enter upon a campaign of education, in order to get any law. The first step in the matter of education is to get the facts together from which the law is to be made, and upon which the law is to be based. The person who wishes to introduce the law, ought to know all about it, all about its bearings, its mode of operation, and, as far as he can, he should know the facts upon which the law he wishes to have passed or enforced is based. I take it, it is like getting appropriations for a state institution, which I know something about. The thing to do when your candidates come up is to provide them with facts in such a way as to educate them as to the justness of your claims, and, in doing so, political methods should not enter into it. Some say trade with your neighbor, so that you can get his vote. An old friend of mine once said to me: "When you trade with your neighbor you are licked, not whipped, but licked." The fact is that if you have the facts entitling you to the law, the thing to do is to get the people whom you expect to put the law on the statute books, in possession of the facts. Convince them that it is a just law. Go to the people and show them that you are honest in your intentions and in your efforts, and that you are sincere. Show them your sincerity, and your integrity in the purposes. No man has a right to ask anything of a legislator when the people have no confidence in him. No board has a right to ask the legislature for anything when they have not the utmost confidence of the people. Now, in the State of Kansas is the only place, in my experience, where the minority enforce the laws, and that is the law on prohibition. A few men out in Kansas City, Kansas, took it in their heads that they would enforce the law against the majority, and their position was that they were just and right against the majority who were wrong. The majority is not always right; neither is the majority always wrong; and neither is the minority always right, but you must first be just and right, and go to the people with clean hands and an honest purpose, and then you will have some basis upon which you can ask for their support, and upon no other basis can you expect their support. I believe in putting it up to the people in this way:

Now, is this law just? Are these facts the facts in your neighborhood, in your state, in your community, in your commonwealth, wherever it be? If these are the facts, ought they to be this way, or should they be some other way? Talk with them about the justness and right of the situation. When you present the case to them in this manner, with a just cause, and an honest purpose, you can ask them for something and expect to get it. Now, you can say to the legislators, "Are you willing to give us what is right, and what the people want?" Lay the facts before them, and let them see that you are entitled to what you are asking for. That is the way the buildings for the university of Oklahoma were secured. We showed them what our neighbors were doing, and what we needed, and the people demanded of the legislature that they give us these things. The question should be: "Is it right? Is it just? Is it proper? Are you legislators going to give us what the people want? Are you going to give us what is just in a true cause? This is my idea about getting laws that we need, and getting laws that can be enforced. You can't enforce a law beyond public sentiment. If you do it, you do it at great expense, and certainly at great hardship. It is necessary to have the backing of the community. I believe that when we go before the people, we should go with clean hands. We must not lose sight of the fact that in the enforcement of the pure food and drugs law, we must all come to the people with good citizenship, with clean hands, and you must be entitled to get what you ask for, based on justice and right. You must give something in return for what you get. You must show an honest purpose. If you expect to get returns on your labor, and returns on your money, as you would in feeding your horse to do your labor on the farm, you must be honest in your purposes. We can feed brains into men, or we can feed them out. Go to the people with clean hands, and clean idea and an honest purpose. If you want a sanitary law, show them the condition of things. Let them know the facts. When they see how things stand, then the people will give you those things, and you can get them. (Applause.)

The President: Gentlemen, is there any further debate? If there is no further debate, the Chair has a few announcements that he desires to make. The Chair would beg to appoint on the committee authorized this morning, the purpose of that committee being, as the Chair understands it, to look after the subject of the limits of tolerance in drugs adulterations, and report to the next meeting of this Association, or to the Executive Committee, the question not being very clear, as to who shall receive the report. The committee will probably be able to determine that itself. You will remember, that Dr. Caspari, by the motion, was made chairman of that committee. It is presumed by the Chair that this committee, like others, will consist of five members. I will appoint on that committee Dr. A. N. Cook, of South Dakota; Mr. J. K. Emery, of Wisconsin; Dr. M. E. Jaffa, of California, and Dr. Herman Harms, of Utah.

The Chair is requested to announce that the auditor of the railway companies of the city has secured a sufficient number of tickets to authorize their validation as excursion tickets, or tickets of members living nearby. If you will apply at his office tomorrow morning, in the city, he will validate such tickets. He tells me that there are a few. I am also requested to announce again that the boat will leave the wharf tomorrow at nine o'clock sharp, and if you are not there at nine o'clock, you will not get on. The wharf is called the Colman Dock, and is located at the foot of Marion street, which is the street on this side of this building. There are some reports of committees to be received. I think the report of the Credentials Committee will come first.

REPORT OF THE COMMITTEE ON CREDENTIALS

Your committee respectfully submits the following named persons as entitled to represent their respective states and departments, as voting members at this, the sixteenth annual session of the Association of American Food, Drug and Dairy Officials:

ALABAMA.

C. H. Billingsley.

CALIFORNIA.

M. E. Jaffa, Director of State Food and Drug Laboratory.

CONNECTICUT.

H. F. Potter, Dairy and Food Commissioner.

IDAHO.

James H. Wallis, State Dairy, Food and Sanitary Inspector.
R. D. Mason, Chief Chemist.

ILLINOIS.

A. H. Jones, State Food Commissioner.
John J. Newman, Assistant.
Dr. T. J. Bryan, State Analyst.

INDIANA.

H. E. Barnard, State Food Commissioner.

IOWA.

W. B. Barney, State Dairy and Food Commissioner.
J. R. Chittick, State Chemist.

KANSAS.

S. J. Crumbine, Secretary, Board of Health.
Professor J. T. Willard, State Food Analyst.

KENTUCKY.

R. M. Allen, Head Food and Drug Division, Experiment Station.

MARYLAND.

Charles Caspari, Director of State Food and Drug Laboratory.

MICHIGAN.

Gilman M. Dame, State Dairy and Food Commissioner.

MINNESOTA.

J. G. Winkjer, Dairy and Food Commissioner.

MISSOURI.

W. P. Cutler, Food and Drug Commissioner.

NEBRASKA.

Nels P. Hansen, Drug, Food and Dairy Commissioner.

NEVADA.

S. C. Dinsmore, in Charge of Food Control.
S. E. Ross, Assistant Chemist.

NEW YORK.

George L. Flanders, General Counsel in General Charge of Food Laws.

NORTH CAROLINA.

W. M. Allen, State Food Chemist.

NORTH DAKOTA.

E. F. Ladd, Commissioner and Chemist.

OKLAHOMA.

U. S. Russell, Assistant Food and Drug Commissioner.
E. DeBarr, Director of the State Laboratory, Food and Drug Commissioner.

OREGON.

J. W. Bailey, Dairy and Food Commissioner.
Ed. T. Judd, Chief Deputy State Dairy and Food Commissioner.

PENNSYLVANIA.

James Foust, Dairy and Food Commissioner.
Dr. William Freer, Chief Chemist.

RHODE ISLAND.

F. A. Jackson, Food and Drug Commissioner.

SOUTH DAKOTA.

A. N. Cook, State Food and Drug Commissioner.

TENNESSEE.

L. P. Brown, State Food and Drug Commissioner.

TEXAS.

R. H. Hoffman, Assistant Chemist, Food Work.
UNITED STATES DEPARTMENT OF AGRICULTURE.
B. H. Rawl.
Dr. M. Dorset.
H. M. Loomis.

UTAH.

Willard Hansen, Dairy and Food Commissioner.
Herman Harms, State Chemist.

WASHINGTON.

L. Davies, Dairy and Food Commissioner.
Elton Fulmer.

George W. Johnson, Chemist.

WISCONSIN.

J. Q. Emery, Dairy and Food Commissioner.

In submitting this report, your committee think it proper to call the attention of the Association to the exact language of Section 1 of Article 10, of the new constitution, to-wit: "Section 1. The voting members of the Association shall consist of the Secretary of the United States Department of Agriculture and the executive officer or officers of State laws regulating the sale of drugs, and of dairy and other products, or in their absence, such officers subordinate to them in the administration of the laws regulating the sale of drugs and of dairy and other food products, as they may designate by proper credentials."

In making this report, your committee has given broad construction to the term "proper credentials," and perhaps broader than should be given at future meetings.

Respectfully submitted,
(Signed) W. M. ALLEN, Chairman.
(Signed) S. C. DINSMORE,
(Signed) J. Q. EMERY,
Committee on Credentials.

The President: Gentlemen, you have heard the report of your Committee on Credentials. Without objection, it will be received.

The report of the Auditing Committee is to be heard. Is the Auditing Committee ready to report?

Mr. Ladd of North Dakota: Mr. President, I am sorry to say that since I discovered I was chairman of that committee, or a member of that committee, I haven't been able to get that committee together. Owing to the fact of going so early this morning to the University and coming back so late, we have not been able to get together and have a meeting. So, I don't know what we can do about the matter, unless we meet after the session this evening.

The President: I will make this suggestion: The Auditing Committee makes a report which is more or less of a formal matter, and, of course, it stands to reason that, as we have been pressing so much work into the short time we have been here, we have had very little time for outside work; the chair would suggest, if it is not out of order, that that committee can make its report to the Executive Committee, and the Executive Committee can receive the same, and act for the Association. Does that meet with the pleasure of the house? If so, it seems to me that a motion to that effect should be made.

Mr. Flanders of New York: Mr. President, I move that the Auditing Committee be given more time to report, and when their report is ready, if this meeting has adjourned, that they report to the Executive Committee.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion, which has been duly seconded. Is there any discussion? All in favor of the motion say "Aye." The opposed, "No." The ayes have it, it is so ordered.

The next order of business is the election of officers.

Mr. Caspari of Maryland: Mr. President, may I make a few brief remarks at this point?

The President: Yes, Dr. Caspari.

Mr. Caspari of Maryland: The committee that was just appointed, regarding the regulation of tolerances, in connection with drugs, is requested to meet at the next annual meeting. I should like to state to the convention that they should not look for a complete report at that time. The revision of the Pharmacopoeia is going on at the present time, and will not be out until the fall of 1913. The Pharmacopoeia, of course, will be largely our guide in connection with our work, and as I happen to be a member of the Revision Committee, I will be in possession of a great many facts that will be embodied in the Pharmacopoeia in advance. Notwithstanding that, however, the complete report we will not be able to make until after the completion of the work of the revision of the United States Pharmacopoeia.

Mr. Bryan: Before the election of officers I would like to make a motion that this Association extend its thanks to the officers of this Association for the efficient and energetic manner in which they have carried on the business of the Association during the past year.

The motion was duly seconded.

The President: Dr. Barnard, will you kindly put that motion?

Mr. Barnard: Gentlemen, you have heard the motion. All in favor of the motion, signify by saying "Aye." Contrary, "No." It is a unanimous vote. (Applause.)

The President: Gentlemen, I think I speak for all the officers in saying that we appreciate this compliment very much indeed.

The first officer to be elected for the ensuing year, and the next session, is the president. I will appoint as tellers Dr. Cook and Mr. Barney. The new constitution provides, by Article XI, which, I believe, has not been changed from the copy which I hold in my hand: "In voting by ballot, or otherwise, each state properly represented as provided in Section 1 of Article X, and the United States Department of Agriculture properly represented as provided therein, shall be entitled to three votes, which may be cast as a unit, or in fractions thereof. No state or department more than one year in arrears of the dues fixed by the Association shall be entitled to vote." Nominations are now in order for the office of president. Are any nominations to be made for President?

Mr. Barnard of Indiana: Mr. President, I place the name of L. Davies in nomination for the office of president for the ensuing year. (Applause.)

The motion was duly seconded.

Mr. R. M. Allen of Kentucky: Mr. President, I rise to second that nomination, and move that the nominations for president close, and that we proceed to elect Mr. Davies by acclamation.

The nomination was duly seconded.

The President: Gentlemen, it has been moved and seconded that the nominations for president be closed, and that we proceed to elect Mr. Davies President by acclamation. All in favor, signify saying "Aye." Opposed, "No." The ayes have it.

Mr. Foust of Pennsylvania: Mr. President, I move that the Secretary be instructed to cast the ballot of the Association for Mr. Davies as President.

Delegate: A point of order. There is a constitutional provision covering the matter, and we can't suspend the constitution for this purpose.

Mr. Allen of Kentucky: Mr. President, if the Chair will permit me, I will make this motion: That the Secretary be instructed to cast the vote of the Association as a unit for Mr. Davies for President.

The President: Gentlemen, the Chair will rule that that is in order. Is there a second to Mr. Allen's motion?

Mr. Barnard of Indiana: I second the motion.

The President: Gentlemen, all in favor of the motion instructing the Secretary to cast the vote of the Association as a unit for Mr. Davies for President will say "Aye." Contrary, "No." The motion is carried unanimously, and the Secretary is so instructed.

The Secretary: Mr. President, the Secretary takes great pleasure in casting the vote of the Association for Mr. L. Davies of Washington as President of the Association for the ensuing year.

The President: Gentlemen, Mr. L. Davies of Washington is declared elected President of the Association for the ensuing year.

The next order of business is the election of a first vice president. The nominations for the office of First Vice-president of the Association are now in order.

Mr. Wallis of Idaho: Mr. President, I place in nomination for the position of First Vice-president of this organization Mr. Willard Hansen of Utah.

Mr. Winkjer of Minnesota: I second that nomination.

The President: Mr. Hansen of Utah has been nominated, and his nomination duly seconded, for the office of First Vice-president of this Association. Are there any other nominations?

Mr. Hansen of Nebraska: Mr. President, I move that the nomination be closed, and that the Secretary be instructed to cast the vote of the Association for Mr. Willard Hansen as First Vice-president of the Association for the ensuing year.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the Secretary be instructed to cast the vote of the Association for Mr. Willard Hansen of Utah as First Vice-president of the Association for the ensuing year. All in favor signify by saying "Aye." Contrary, "No." It is so ordered.

The Secretary: Mr. President, the Secretary again takes great pleasure in casting the vote of the Association for Mr. Willard Hansen as First Vice-president of the Association for the ensuing year.

The President: Gentlemen, Mr. Willard Hansen of Utah is declared elected to the office of First Vice-president of the Association for the ensuing year.

Nominations for the office of Second Vice-president of the Association are now in order.

Mr. Cook of South Dakota: Mr. President, I place in nomination for the office of Second Vice-president of the Association for the ensuing year Mr. W. B. Barney of Iowa.

The nomination was duly seconded.

The President: Gentlemen, Mr. W. B. Barney of Iowa has been nominated, and his nomination duly seconded, for the office of Second Vice-president of the Association for the ensuing year. Are there any further nominations?

Mr. Billingsley of Alabama: Mr. President, I move that the nominations be closed, and that the Secretary be instructed to cast the vote of the Association for Mr. W. B. Barney of Iowa for the office of Second Vice-president for the ensuing year.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the nominations for the office of Second Vice-

president of the Association for the ensuing year be closed, and that the Secretary be instructed to cast the vote of the Association for Mr. W. B. Barney of Iowa for the office of Second Vice-president of the Association for the ensuing year. All in favor of that motion say "Aye." All opposed, "No." The Secretary is instructed to cast the vote of the Association for Mr. Barney for the office of Second Vice-president of the Association for the ensuing year.

The Secretary: Mr. President, the Secretary takes great pleasure in casting the vote of the Association for Mr. W. B. Barney of Iowa as Second Vice-president of the Association for the ensuing year.

The President: Gentlemen, Mr. Barney is declared duly elected to the office of Second Vice-president of the Association for the ensuing year.

Nominations for the office of Third Vice-president are now in order.

Mr. Potter of Connecticut: Mr. President, I wish to place in nomination for the office of Third Vice-president of the Association Mr. Nils P. Hansen of Nebraska.

The nomination was duly seconded.

The President: Gentlemen, Mr. Nils P. Hansen, of Nebraska, has been duly nominated and seconded for the office of Third Vice-President of the Association for the ensuing year. Are there any further nominations? If not, the nominations will be closed.

Mr. Potter of Connecticut: Mr. President, I move that the Secretary be authorized to cast the ballot of the Association for Mr. Hansen, of Nebraska, for the position of Third Vice-president of the Association for the ensuing year.

The motion was duly seconded.

Mr. President: Gentlemen, it has been moved and seconded that the Secretary be instructed to cast the ballot of the Association for Mr. Nils P. Hansen, of Nebraska, for the position of Third Vice-president of the Association for the ensuing year. All in favor of this motion will please say "Aye." Contrary, "No." The motion is carried. It is so ordered.

The Secretary: Mr. President, the Secretary takes pleasure in casting the vote of the Association for Mr. Nils P. Hansen, of Nebraska, for the office of Third Vice-president for the ensuing year.

The President: Gentlemen, Mr. Nils P. Hansen, of Nebraska, is declared duly elected to the office of Third Vice-president of the Association for the ensuing year.

The next nomination in order is for the office of Secretary. Nominations for the office of secretary are now in order.

Mr. Jones of Illinois: Mr. President, I desire to put in nomination for the office of Secretary the Hon. W. M. Allen, of North Carolina, our present Secretary.

The nomination was duly seconded.

The President: Gentlemen, the Hon. W. M. Allen, of North Carolina, has been nominated, and the nomination duly seconded for the office of Secretary for the ensuing three years. Are there any other nominations for the office of Secretary?

Mr. Wallis of Idaho: Mr. President, I move that the nominations for the office of Secretary be closed, and that the President be authorized to cast the vote of the Association for Mr. W. M. Allen, of North Carolina, for the office of Secretary for the ensuing three years.

The motion was duly seconded.

The President: The President begs to report to the Association that he casts the vote of the Association for Mr. W. M. Allen, of North Carolina, for Secretary for the ensuing three years. I suppose it is now in order for the President to declare that Mr. W. M. Allen, of North Carolina, has been duly elected to the office of Secretary of this Association for the following three years.

Nominations are now in order for the office of Treasurer.

Mr. Allen of Kentucky: Mr. President, I place in nomination for the office of Treasurer the name of Commissioner H. F. Potter.

The nomination was duly seconded.

The President: Commissioner H. F. Potter, of Connecticut, has been nominated, and the nomination duly seconded for the office of Treasurer of the Association for the ensuing year. Are there any further nominations?

Mr. Billingsley of Alabama: Mr. President, I move that the nominations be closed, and that the Secretary be instructed to cast the ballot of the Association for Mr. Potter for Treasurer.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the nominations be closed, and that the Secretary be instructed to cast the ballot of the Association for Mr. Potter for Treasurer. All in favor please say "Aye." Contrary, "No." The Secretary is so instructed.

The Secretary: Mr. President, the Secretary takes great pleasure in casting the ballot of the Association for Mr. H. E. Potter, of Connecticut, for the office of Treasurer of the Association for the ensuing year.

The President: The President declares Mr. Potter elected to the office of Treasurer for the ensuing term.

The next nominations in order are those of members of the Executive Committee.

Mr. Allen of Kentucky: Mr. President, for the three year term I place in nomination the name of Commissioner Barnard, of Indiana.

Mr. Winkjer of Minnesota: I second that nomination.

The President: Gentlemen, the name of Mr. H. E. Barnard, of Indiana, has been placed in nomination and duly seconded for the three year term as a member of the Executive Committee. Are there any further nominations?

Mr. Wallis of Idaho: Mr. President, I desire to place in nomination the name of Dr. W. P. Cutler, of Missouri, as a member of the Executive Committee for the three year term.

The nomination was duly seconded.

The President: Gentlemen, Mr. Cutler, of Missouri, has been nominated as a member of the Executive Committee for the three year term. Are there any further nominations? If not, we will proceed to ballot. You will vote, please, by written ballot. The tellers will please collect the ballots.

Mr. Foust of Pennsylvania: Mr. President, is it compulsory that this vote be by written ballot? Can it not be by viva voce?

The President: I think not, sir, under the constitution.

Mr. Winkjer of Minnesota: Mr. President, I would like to ask for some information. Do we cast the vote by marking three votes on the ballot? Do we cast one vote for the whole state, or cast three votes?

The President: As the Chair understands, and if he is mistaken, he desires to be corrected, the person voting marks upon his ballot three votes for so and so.

Mr. Hansen of Nebraska: Will the name of the state be called and the person representing the state go forward with the ballot?

The President: Yes, as the names of the states are called by the Secretary, the person representing the state whose name is called will come forward and drop his ballot in the hat held by the tellers. If you are ready, we will proceed with the ballot. The Secretary will please call the roll. As the names of the states are called, gentlemen, you will please come forward and deposit your vote in the hats which the tellers have.

The meeting then proceeded to ballot on the office of member of the Executive Committee for the three year term.

Mr. Foust of Pennsylvania: Mr. President, I asked before we started to ballot whether I could divide Pennsylvania's vote with Dr. Frear and I was advised that it could not be done. I desire to ask, now, if that is the case.

The President: The Chair begs your pardon, Mr. Foust, but the Chair did not so understand your question. What the Chair understood you to ask was if you could make a viva voce vote.

Mr. Foust of Pennsylvania: Mr. President, it is true that I asked that question of the chair, but I asked the Chairman of the Committee on Credentials about that matter, and was advised that the vote could not be divided.

Mr. Emery of Wisconsin: Mr. President, I would like to state that delegates have come here under the old constitution, and this constitution is hardly twenty-four hours old. The constitution provides in explicit terms that the voter casting the vote shall be the executive of the department. In his absence, another man may vote, if he has proper credentials. That is, the provision of the constitution.

Mr. Foust of Pennsylvania: Mr. President, the reason that I asked this question at this time, is because I noticed that Oklahoma voted with two of its delegates, and I thought if they could do that, I would like to divide the vote of Pennsylvania with Dr. Frear.

Mr. Emery of Wisconsin: Mr. President, there appear to be two executive officers here from Oklahoma. That was why I called—

The President (interrupting): Mr. Emery, think the chair can clear up that proposition. The executive officer of Oklahoma is not here as the chair understands the Oklahoma law. The chair understands that Mr. Mahr is the executive officer of Oklahoma.

Mr. Russell of Oklahoma: Mr. President, I desire to state that Mr. Mahr is here by proxy, credentials being presented by me to the Secretary.

The President: So the chair understands. In other words, the executive officer of Oklahoma is not present in person, which clears up Mr. Foust's suggestion. Gentlemen, the tellers report that there were 49 votes cast for Dr. Cutler, and 30 votes for Dr. Barnard, and the Chair declares Dr. Cutler elected to the position on the Executive Committee for the three-year term.

Nominations for the position of member of the Executive Committee for the two-year term are in order.

Dr. Cutler, of Missouri: I desire to nominate for the position of member of the Executive Committee for the two-year term, Dr. H. E. Barnard, of Indiana.

The nomination was duly seconded.

The President: Gentlemen, Dr. Barnard has been nominated and seconded for the two-year term as a member of the Executive Committee. Are there any further nominations?

Mr. Wallis of Idaho: I move that the nominations be closed, and that the Secretary be instructed to cast the vote of the Association for Dr. Barnard for the two-year term on the Executive Committee.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the nominations be closed, and that the Secretary be instructed to cast the vote of the Association for Dr. Barnard for member of the Executive Committee for the two-year term. All in favor say "Aye." Opposed "No." The motion is carried, and the Secretary is so instructed.

The Secretary: Mr. President, the Secretary takes great pleasure in casting the vote of the Association for the two-year term on the Executive Committee of the Association for Dr. Barnard.

The President: Gentlemen, the Secretary reports that the vote of the Association has been cast for Dr. Barnard for the two-year term on the Executive Committee, and the Chair declares that Dr. Barnard is duly elected to that office.

Nominations are in order for the office of member of the Executive Committee for the ensuing year.

Mr. Billingsley of Alabama: I nominate Mr. Wallis of Idaho, for the position of member of the Executive Committee for the ensuing year.

The nomination was duly seconded.

The President: Gentlemen, Mr. Wallis of Idaho, has been nominated, and the nomination seconded, for the office of member of the Executive Committee for the ensuing year. Are there any further nominations?

Mr. Billingsley of Alabama: Mr. President, I move that the nominations be closed and the Secretary be instructed to cast the entire vote of the Association for Mr. Wallis of Idaho.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the nominations be closed, and that the Secretary be instructed to cast the entire vote of the Association for Mr. Wallis of Idaho, as member of the Executive for the ensuing year. All in favor, say "Aye." Contrary "No." It is so ordered.

The Secretary: Mr. President, the Secretary takes pleasure in casting the vote of the Association for Mr. James H. Wallis of Idaho, for the office of member of the Executive Committee for the ensuing year.

The President: Gentlemen, the Secretary reports having cast the vote of the Association for Mr. James H. Wallis of Idaho, for the office of third member of the Executive Committee for the ensuing year. The President declares Mr. Wallis duly elected.

That completes the list of elections, gentlemen. Is there any further business before the Association?

Mr. Foust of Pennsylvania: Mr. President, I move that we not go into the matter of the selection of the next place of meeting.

The President: I don't know that it is necessary to put a motion that we go into the question of the selection of the next place of meeting. Suggestions in this connection are in order.

Mr. Billingsley of Alabama: Mr. President, and Gentlemen of the Association: I wish to extend to you an invitation to meet next year down on the Coast, in Alabama. I want you to come down to Mobile. Lots of you know what Mobile is. We will give you a nice place in which to meet, and we will give you all the entertainment that your program will permit of. We will arrange everything to suit your convenience, and I promise that you will not find it too hot when you get down there, and you will find that Mobile is as

nice a place as you ever met at. Last year, when I invited you to meet in Alabama, I invited you to meet at Montgomery. This year, I invite you to meet at Mobile. Mobile is on the coast. It is a much pleasanter place for you to go to, and most of you, in going to Mobile, will have to come through Montgomery, and, in that way, you will get to see both places, and when you get down there, I am sure you will enjoy yourselves, and I sincerely trust that you will finally adjourn to meet at Mobile.

Mr. Allen of Kentucky: Mr. President, I wish to second the nomination to meet at Mobile, Alabama, at our next meeting. We met in New Orleans once, and the convention is due to go South again, and I am sure, from what I know of Mobile that the convention will have a very, very good time there.

Mr. Cook of South Dakota: Mr. President, I desire to ask the members of this Association to meet next year in South Dakota. Last year, we met in Duluth. The year before, we met in New Orleans, and now we have met this year in the Far West,—so far west, indeed, that many commissioners, and many food officials were not able to attend. I want to invite you to meet in a place nearer the center of the United States. I believe that Kansas claims to be the center of a good many things, but so far as east and west is concerned, we are about the center. I wish to read a telegram that I have here, which happens to be addressed to me, and then I want to make just a very few remarks: This is addressed to me in care of the National Food Congress: "Deadwood extends greetings to your most worthy organization, and invites you to hold your next annual meeting in this city. We offer you excellent hotel accommodations, and the most desirable and agreeable place in the United States for your meeting. We will take most excellent care of you all, and thank you kindly for any considerations which you may extend." I desire to say that the hotel accommodations of Deadwood are, indeed, excellent. Leads and Deadwood are located very close together. They are about twenty minutes apart on the street car. Lead is in the valley, and Deadwood is on a mountain, about 1,000 feet higher. I believe that many of you get a wrong impression about the middle west in your travel out here. It is not all a desert region. Lead valley is considered to be the richest five miles square in the United States, or in the world, for that matter. The scenery compares very favorably with what you have seen in other places. A trip through the Spearfish Canyon is quite equal to the trip up Mount McClellan, which some of you took four years ago. It leads you over a mountain path two miles above the level of the sea, and down into a deep canyon, where the scenery is unsurpassed. In my trip to the coast this time, the highest point I reached at any time, was one mile above the level of the sea. There are many other things of interest. I do not know of any other one spot in the country where there are so many things of interest packed in such a small space. There we have the richest mine in the world, as many of you know. There will be an opportunity to see gold bricks cast. (Laughter.) They are worth \$20,000 apiece. It is done about every week. You will have an opportunity to pass through the renowned bad lands, or even visit the Hot Springs, or Sylvan Lake, and the scenery, I am warranted in saying, is unsurpassed. I desire to have you meet in a state where the bank deposits are the greatest per capita of any state in the Union, and where the people own more automobiles per capita than any other state in the Union. (Applause.)

The nomination was duly seconded.

Mr. Hansen of Nebraska: Mr. President, I come from a state where we pride ourselves on having the greatest amount of intelligence per capita of any state in the Union, but, best of all, I assure you that it is more equally distributed than any other state in the Union. South Dakota is our sister state, and it affords me great pleasure to second the nomination of Mr. Cook. I am satisfied from what I know about Deadwood, that you will have a hot time all the time you are there.

The President: Are there any further nominations?

Mr. Foust of Pennsylvania: Mr. President, as we all know, the colleges start in September, and they close their term along about May or June. About two years ago we met down in New Orleans. Our courts also start all over the country along about the first of September, and in two or three years from now, we will want to come west again, and, possibly, South Dakota would come in then. We could have stop-over privileges there, and those who wanted to go on to the coast could go on, or they could go on first and then stop there coming back. I feel that this Association, next year, ought to go east to some central point, and I want to say that in the city of Chicago, they have immense hotels,

with meeting rooms along the beach where we can hold our sessions, and live right there. To go away down to Alabama and interfere with our official duties would be a mistake, and would interfere with the delegates who have to attend to their duties at the colleges. It would be a mistake to go there within three years after we met at New Orleans. I want to place in nomination for the next place of meeting of this association, the city of Chicago.

Mr. Barnard of Indiana: Mr. President, and Gentlemen of the Association: All feeling aside, and all state pride aside, I think the Association would do well to go to Chicago in 1913. I agree heartily with what Mr. Foust has said about the interruption of our work, and we should get together with the very largest number of food commissioners possible, in order that we may carry forward with greatest success, the work which we have so admirably started at this convention.

Mr. Wallis of Idaho: Mr. President, I rise in behalf of the state of Idaho, to second the nomination of Mr. Billingsley, who has presented here the claims of his state, for the Association to meet next year at Mobile. We have listened to many attractive statements made by Commissioner Billingsley about his country; we have heard about many wonderful things that he has in Alabama, and, for my part, I want to support the claims of his state, and take the trip to Alabama, not particularly with a banjo on my knees, but that I may see some of the resources and some of the wonderful things Mr. Billingsley has been telling us about ever since we met together in this city.

Mr. Billingsley of Alabama: Mr. President, I would like to say just one word in answer to the gentleman from Pennsylvania. He didn't say it in so many words, but he intimated that we didn't have a place for you to live in Mobile. I want to say to the gentleman from Pennsylvania that we have as good places in Mobile to live as they have in—

(Interrupted.)

Mr. Foust of Pennsylvania: I rise to a point of order. The President: I think the gentleman is out of order. Take your seat.

Mr. Foust of Pennsylvania: The gentleman misunderstood me. I did not say and did not mean anything of that kind.

The President: Mr. Billingsley is out of order.

Mr. Billingsley: I yield, Mr. President, but I still don't agree with your ruling.

The President: Then, you may appeal to the house.

Mr. Hansen of Nebraska: Mr. President, I move that the nominations be closed, and that a vote be taken.

The President: The Chair hardly thinks it is necessary to motion. How will you vote upon this question. Do you desire to vote by states?

Mr. Wallis of Idaho: Mr. President, I move that we take a viva voce vote by states.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion that we take a viva voce vote by states. All those in favor, signify by saying "Aye." All those opposed, "No." The motion is carried. The Secretary will proceed to call the roll, and as the roll is called, the members will vote viva voce.

Alabama: 3 for Mobile.

California: 3 from California for Mobile, Alabama.

Connecticut: 3 for Mobile.

Idaho: 3 for Mobile.

Illinois: 3 for Mobile.

Indiana: 3 for Chicago.

Iowa: 3 for Mobile.

Kansas: 3 for Deadwood.

Kentucky: 3 for Mobile.

Maryland: Mr. Charles Caspari of Maryland: Mr. President, I suppose I can vote either way. I am about as ready to vote for one city as another. Being a new member here, I hardly know how to vote on the question. The larger number of the members seem to be in favor of Mobile, as far as the vote has gone. Personally, I have no preference. If we are going to be cool at Mobile, I will go to Mobile. If it is going to be hot there, I will go to Chicago.

The President: Do you desire to vote?

Mr. Caspari: No; I think I better not vote. I will go either place.

The President: We will pass Maryland.

Michigan: 3 for Deadwood.

Minnesota: 3 for Deadwood.

Missouri: 3 for Mobile.

Nebraska: 3 for Deadwood.

Nevada: 3 for Mobile.

New York: 3 for Mobile.

North Carolina: 3 for Mobile.

North Dakota: 3 for Chicago.

Oklahoma: 3 for Mobile.
 Oregon: 3 for Mobile.
 Pennsylvania: 3 for Chicago.
 Rhode Island: Mr. F. A. Jackson: Three for Chicago.
 My reason for voting for Chicago, is that it would bring a larger representation from New England than any other place that I know of.
 South Dakota: 3 for Deadwood.
 Tennessee: 3 for Deadwood.
 Texas: 3 for Mobile.
 United States Department of Agriculture: 3 for Chicago.
 Utah: 3 for Mobile.
 Washington: 3 for Mobile.
 Wisconsin: 3 for Chicago.

Mr. Hansen of Utah: Mr. President, I would like to say a word while the tellers are counting the ballots. I understand that there are a good many of the delegates here who will pass through Salt Lake City on their way to the place of the next meeting, and we extend an invitation to all of you to stop off at Salt Lake City and visit us. This is a beautiful time of the year to visit that city. A number who are in attendance at this meeting will pass through Salt Lake City, I understand, on their return trip, and we extend you a hearty invitation to stop off there. We have the Great Salt Lake there that contains 24 per cent salt in solution. You can swim there without half trying. In fact, it would be absolutely impossible for you to sink. It is also said that in case any of us is inflicted in any way with any of these microbes we have picked up, we can go there and get clean hands. We also have some of the greatest mines in the world and smelters there. We have one mine there that paid a dividend last year of \$4,500,000. You can see the great Mormon Temple, that was forty years in construction. The Tabernacle can also be seen, and every day they have a recital there at 12 o'clock. This is entirely free. We trust you can go that way next year, and we hope that about 1915 or 1916 we will have the Association meet in Salt Lake.

The Secretary: Mr. President, the tellers report the result of the ballot as follows: Mobile, 42; Deadwood, 21; Chicago, 18.

The President: The President declares that Mobile has received a plurality of the votes, and is therefore declared to be the next place of meeting of this Association.

Mr. Allen of Kentucky: Mr. President, I move that the vote for Mobile be made unanimous, so that we will have a full delegation.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion that the vote for Mobile as the next place of meeting be made unanimous. All in favor signify by saying "Aye." Those opposed, "No." The motion is carried.

Gentlemen, the Chair desires to confess an oversight, over our constitution, about which we have more than once become entangled within the last forty-eight hours. The Committee on Coöperation is provided for by election and not by appointment. There are three members. Article 9 of the constitution reads: "The Committee on Coöperation shall consist of three voting members of the Association. At the first election the first elected shall be for three years, the second for two years and the third for one year, after which one member shall be elected each year to serve a period of three years." Without objection, we will proceed to the election of the Committee on Coöperation.

Mr. Barnard of Indiana: Mr. President, I place in nomination for the three year term the name of one man who has coöperated. I present the name of Dr. Crumline of Kansas.

The nomination was duly seconded.

The President: Gentlemen, Dr. Crumline of Kansas has been nominated, and the nomination duly seconded for the three year term as a member of the Committee on Coöperation. Are there any further nominations?

Mr. Wallis of Idaho: Mr. President, I move that the rules be suspended and that the Secretary be instructed to cast the vote of the convention for Dr. Crumline for the three year term as a member of the Committee on Coöperation.

The motion was duly seconded.

The President: Gentlemen, It has been moved that the rules be suspended, and that the Secretary be instructed to cast the vote of the Association for the three year term as a member of the Committee on Coöperation for Dr. Crumline of Kansas. All in favor will signify by saying "Aye." Contrary, "No." The motion is carried, and the Secretary is so instructed.

The Secretary: Mr. President, the Secretary takes pleasure in casting the vote of the Association for Dr. S. J. Crum-

line of Kansas for the three year term as a member of the Committee on Coöperation.

The President: The President declares Dr. Crumline elected for the three-year term as a member of the Committee on Coöperation.

Nominations for the second member on the Committee on Coöperation are in order.

Mr. Flanders of New York: Mr. President, I nominate Mr. Jones of Illinois for the two year term on the Committee on Coöperation.

The nomination was duly seconded.

The President: Gentlemen, Mr. Jones of Illinois has been nominated as a member on the Committee on Coöperation for the two year term. Are there any further nominations?

Mr. Judd of Oregon: Mr. President, I move that the nominations be closed, that the rules be suspended and that the Secretary be instructed to cast the vote of the Association for Mr. Jones for the two year term on the Committee on Coöperation.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the nominations be closed and that the Secretary be instructed to cast the vote of the Association for Mr. Jones for the two year term on the Committee on Coöperation. All in favor signify by saying "Aye." Those opposed, "No." The motion is carried, and the Secretary is so instructed.

The Secretary: Mr. President, the Secretary takes pleasure in casting the vote of the Association for Mr. A. H. Jones of Illinois for the two year term on the Committee on Coöperation.

The President: Gentlemen, the Secretary has cast the vote of the Association for Mr. Jones of Illinois for the two year term on the Committee on Coöperation, and Mr. Jones is declared elected.

Nominations are in order for election of the third member on the Committee on Coöperation.

Mr. Jones of Illinois: Mr. President, I nominate Dr. Jaffa of California for the one year term on the Committee on Coöperation.

The nomination was duly seconded.

The President: The name of Dr. Jaffa of California has been nominated and seconded for the one year term on the Committee on Coöperation. Are there any other nominations?

Mr. Bryan of Illinois: Mr. President, I move that the nominations be closed and that the Secretary be instructed to cast the vote of the Association for Dr. Jaffa for the one year term on the Committee on Coöperation.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the nominations be closed and that the Secretary be instructed to cast the vote of the Association for Mr. Jaffa of California for the one year term on the Committee on Coöperation. All in favor of this motion will please say "Aye." Contrary, "No." The motion is carried and the Secretary is so instructed.

The Secretary: Mr. President, the Secretary takes great pleasure in casting the ballot of the Association for Mr. M. E. Jaffa of California for the one year term on the Committee on Coöperation.

The President: The Chair declares Dr. Jaffa of California elected for the one year term on the Committee on Coöperation.

The next order of business is miscellaneous business.

Mr. Barnard of Indiana: Mr. President, I desire to state that the Resolutions Committee is ready to report.

The President: Very well, we will hear the report of the Committee on Resolutions.

It has not been decided how these resolutions will be considered. If the Chair may make a suggestion, it would be that the resolution will be read and if there are any objections to any of the resolutions, the objection should be made as each resolution is finished, so that it will not be necessary to retrace our steps in any particular. Without objection, that method will be followed.

Mr. Barnard of Indiana: Mr. President, the Committee on Resolutions has considered carefully the resolutions presented and handed to the committee, and reports the following:

"Resolved. That the members of the American Association of Dairy, Food and Drug Officials express to the Hon. George F. Cotterill, Mayor of this beautiful city of congenial climate and picturesque surroundings; to Hon. L. Davies, State Dairy and Food Commissioner to the University of Washington; the Commercial Club and to others who have

joined in making our stay pleasant, our hearty thanks for their cordial hospitality.

"Resolved, That this Association express to Governor M. E. Hay and President Thomas F. Kane its appreciation of their sympathetic and inspiring addresses relative to the important work in which we are engaged.

"Resolved, That this Association expresses to the Committee on Coöperation its hearty thanks for its efficient work, and urges the further development of its comprehensive plan for practical coöperation between the States and the Federal Government in the enforcement of food laws.

"Whereas, The National food and drugs act, under the decision of the Supreme Court of the United States, does not apply to false and exaggerated claims for efficacy of patent medicines, and, whereas, the usefulness of that law is thereby greatly restricted, be it

Resolved, That this Association heartily endorses the message of the President of the United States, recommending the amendment of the law, so as to prevent the interstate shipment of medicines which are falsely labeled as to their curative effect, and urges upon Congress the necessity for the early enactment of remedial legislation.

"Resolved, That this Association favors the amendment of the National food and drug act, June 30, 1906, to compel the branding of the weight or measure upon all packages of food, and that we hereby reaffirm the resolutions adopted by this Association in annual meeting at New Orleans and at Duluth favoring compulsory weight or measure branding.

"Resolved, That this Association expresses its judgment that there is need for such amendment of the present national oleomargarine law as shall strengthen it at points where it has been found effective, and hereby approves the type of legislation set forth in the bill drafted by the National Dairy Union, to the end that both consumers may be protected from deception and honest producers from unfair competition.

"This Association, realizing the need of an improved agriculture that will meet the conditions of an ever increasing food consumption, urgently recommends the enactment of such legislation as will promote the improvement of agricultural methods and tend to the conservation of the lands fertility.

"Whereas, There are now being extensively introduced upon the market various products composed of skim milk, intimately mixed with added cream, butter or butterfat, or other fats;

"Whereas, These products are offered instead of normal milk and cream, both for direct consumption and for use as raw materials in the manufacture of so-called ice cream and other food articles usually made directly from milk or cream;

"Resolved, That it is the judgment of this Association that these modifications of, and substitutes for, milk and cream and also the food articles for whose preparation they are employed instead of normal milk or cream are not properly salable under the commercial names of the corresponding normal food articles, but should bear designations clearly distinguishing them from said normal articles.

"Recognizing the extent of the fraud in the manufacture and sale of adulterated linseed oil, this Association urges the enactment by the several states of uniform laws regulating the manufacture and sale of linseed oil, and further urges on the Congress of the United States the adoption of a law which will effectively regulate the shipment of adulterated linseed oil in interstate commerce, to the end that the consuming public and reputable manufacturers of linseed oil may be properly protected.

"Whereas, Meat inspection is one of the most important phases of pure food work, and the experience of all nations has shown the need for protecting the people from the danger of contaminated, spoiled and diseased meat;

"Resolved, That the national Congress be requested to appropriate the funds necessary to carry the blessings of the national meat inspection act into the widest effect, and that all states and cities be urged to provide a complete system of sanitary and disease inspection for all meats exempt from Federal jurisdiction.

"Recognizing the danger of the spread of disease by the medium of the food supply, and appreciating the fact that the passage of well designed sanitary laws has furnished adequate means by which to eliminate persons suffering from syphilis, gonorrhea, consumption and other infectious diseases from the ranks of food handlers, this Association urges the rigid enforcement of such legislation, and the development of a practice of physical inspection that will insure sound, healthy workers with the food supply.

"Recognizing in Dr. Harvey W. Wiley, the Nestor of pure food activity in America, and the leader in securing the enactment of the national food and drugs act, this convention

expresses to Dr. Wiley its warm appreciation of his unswerving devotion to the consumers' welfare, and of the value of his constructive work in many branches of agricultural and food chemistry."

Mr. Wallis of Idaho: Mr. President, I move that the statement just read with reference to Dr. Wiley be eliminated from the resolution.

The motion was duly seconded.

The President: Gentlemen, it has been moved and seconded that the resolution which has just been finished be eliminated from the resolution. Do you desire to debate the question?

Mr. Emery of Wisconsin: Vote by states.

The President: A vote by states has been called for. Do you mean a roll call, Mr. Emery?

Mr. Emery of Wisconsin: Yes, sir.

The President: A roll call has been called for. The motion is that this plank be eliminated from the resolutions. The Secretary will please call the roll. The Chair desires to state that a vote of "Yes" means to eliminate this resolution. A vote of "No" upon the motion means that the resolution shall stand as read.

Alabama:

Mr. Billingsley of Alabama: Mr. President, Alabama votes 3 "yes" to eliminate the motion, and I wish to explain this vote by saying that this is not a vote against Dr. Wiley or any other man, but I don't believe that this Association ought to vote to commend any man for performing the duties he is paid to perform. I don't believe we ought to vote to commend any man, or to condemn any man. We came here for a certain purpose, and not for the purpose of passing commendatory or condemnatory resolutions.

California: 3 no.

Connecticut: 3 yes.

Idaho: 3 yes.

Illinois: 3 yes.

Indiana: 3 no.

Iowa: 3 yes.

Kansas: 3 no.

Kentucky: 3 no.

Maryland: 3 yes.

Michigan: 3 yes.

Minnesota:

Mr. Winkjer of Minnesota: 3 no. I wish to explain my vote in this way: That it is not any desire to have this in the resolutions for any factional expression, but simply as an expression of appreciation to a retiring officer.

Missouri: 3 yes.

Nebraska: 3 yes.

Nevada: 3 yes.

New York: 3 yes.

North Carolina:

Mr. Allen of North Carolina: I will vote 3 no, and as Mr. Winkjer of Minnesota has said, I don't wish to do this for any factional purpose, but merely to approve the work of a retired officer.

North Dakota: 3 no.

Oklahoma: 3 yes.

Oregon: 3 yes.

Pennsylvania: 3 no.

Rhode Island: 3 no.

South Dakota:

Mr. Cook of South Dakota: South Dakota votes 3 no, and I desire to say that it is for the reason that Mr. Winkjer has explained, and for that reason only.

Tennessee: 3 no.

Texas: 3 no.

United States Department of Agriculture: 2 yes; 1 no.

Utah: 3 yes.

Washington: 3 yes, for the same reasons expressed by Mr. Billingsley.

Wisconsin: 3 no.

The President: The chair desires to announce a vote of 47 "yes" and 40 "no." The motion is carried, and the plank is stricken out.

The Chairman of the Committee on Resolutions will proceed with the reading of the resolutions.

Mr. Barnard of Indiana: "We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods rests with the manufacturer, and not with food executives, and departments, nor with the consumer; and we, therefore, demand that the food supply contain no ingredients other than those recognized by long usage as harmless, or proved beyond question as not injurious."

Mr. Flanders of New York: Mr. President, that resolution is very puzzling to me. I didn't suppose it was necessary for an executive to prove a thing harmless. It is for him to

determine whether it is harmful or not, and, if it is harmful, to stop its use. I understand there is a legal proposition involved there that I don't want to indorse, and at the same time there is a proposition involved there, as a principle, that I would like to endorse. It seems to me that that resolution is a little conflicting. I will ask you to read the first part of that again.

Mr. Barnard of Indiana: "We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods rests with the manufacturer, and not with food executives and departments, nor with the consumer."

Mr. Flanders of New York: My point is this: That no executive has anything to do with the matter until he can show that it is harmful. No one has contended for a moment that it is the business of an executive officer to prove the harmlessness of anything. That is axiomatic. The executive has nothing to do with it if it is harmless. It is with the harmful things that he should have to do.

Mr. Barnard of Indiana: Mr. President, may I interrupt here to say that I wrote the first part of that resolution myself, and I thought it was pretty good. (Laughter.) Let me explain my idea, if I may, for writing that resolution: My idea was to point out that this Association thought that the food manufacturer himself ought to determine whether the substances he puts into his food products are injurious or not, rather than to put the burden of determining that upon the executive, and make the executive do that work by long drawn out investigation, in order to determine whether or not they are injurious.

Mr. Flanders of New York: Mr. President, I move as a substitute for that resolution, as the sense of this organization, that food manufacturers in putting substances into their food products should do all that they can to ascertain that they are harmless before using them.

The motion was duly seconded.

The President: The Chair believes it would be well to ask the mover to put that proposed resolution into writing.

Mr. Flanders of New York: All I want to do is to get away with the idea that is conveyed by this proposed resolution that the executive officer looks after the harmlessness of it.

Mr. Barnard: I might say that we are continually called upon to do that very thing. We are doing it now. We have found a new thing in food stuffs, let us say, and we don't know whether it is harmless or harmful, and, therefore, we go through experiments at considerable expense to determine what the manufacturer should have determined himself.

Mr. Bryan of Illinois: Mr. President, I would suggest that if the word "should" were inserted in the resolution before the word "rests," that would approximate, at least, the idea of Mr. Flanders, in my opinion. It would then read: "We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods should rest with the manufacturer."

The President: The Chair would suggest that Mr. Barnard read the resolution with the amendment as proposed by Mr. Bryan to the Association.

Mr. Barnard: "We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods should rest with the manufacturer, and not with the food executives and departments, nor with the consumer."

Mr. Flanders of New York: It would be all right, if he would leave off the last clause.

The President: Does Mr. Flanders desire to put this in the form of a motion as amended? It has been suggested that if the committee accepts the amendment, it is not necessary to put it in the form of a motion, and it is, therefore, so ordered.

Mr. Barnard of Indiana: So it will read:

"We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods should rest with the manufacturer."

Mr. Flanders of New York: If it is reported that way, I have no objection.

Mr. Barnard of Indiana: "And we therefore demand that the food supply contain no ingredients other than those recognized by long usage as harmless, or proved beyond question as not injurious."

Mr. Flanders of New York: Mr. President, on the last proposition, I would rise again. It seems to me that that would cut off anything that you might discover in the future that might be harmless, but be a beneficial product. That is, a substance that has not yet come out on the market, but may come later. For instance, I believe there is a substance on

the market now, known as "Crisco." Suppose a new product comes on the market tomorrow.

Mr. Barnard of Indiana: Mr. President, I would point out to the speaker that the first paragraph of this resolution has put it up to the manufacturer before he puts the product on the market to show that the substances are harmless.

Mr. Flanders of New York: You will notice that the last clause says that the food supply should contain no ingredients other than those recognized by long usage as harmless.

Mr. Barnard of Indiana: "Or proved beyond question as not injurious."

Mr. Cook of South Dakota: I would like to say that I believe that the substances in Crisco, which has been mentioned, have long been known as non-injurious. They are simply fats, as I understand it, that have been obtained from cotton seed oil, cotton seed sterin. It has long been known in that light.

Mr. Allen: I would like to know, jokingly, how much stock Dr. Cook has in Crisco.

The President: The gentleman is out of order.

Mr. Flanders of New York: I will be satisfied with the resolution putting the burden on the manufacturer, as to the harmlessness of substances used in foods, but I would not want to bind the future, by providing that no new products could come out.

Mr. Emery of Wisconsin: I can't understand your argument there, inasmuch as your objection is, as you have stated, and this proposed resolution provides that if the ingredients are not those recognized by long usage as harmless, they may be proved beyond question as not injurious.

Mr. Flanders of New York: I don't understand that to be the meaning of the resolution. I would like to have it read again.

Mr. Barnard of Indiana: "We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods should rest with the manufacturer; and we, therefore, demand that the food supply contain no ingredients other than those recognized by long usage as harmless, or proved beyond question as not injurious." In other words, we don't want to be poisoned, if we know it.

Mr. Flanders of New York: Mr. President, I move that the last part of the resolution be stricken out.

The President: Indicate exactly what portion of it you refer to.

Mr. Flanders of New York: All that portion after the word "manufacturer," if I remember it correctly.

The motion was duly seconded.

The President: For a clearer understanding by the house of the resolution referred to by the motion, the Chair would ask Dr. Barnard to re-read the resolution. Gentlemen, please pay attention.

Mr. Barnard of Indiana: "We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods should rest with the manufacturer; and we, therefore, demand that the food supply contain no ingredients other than those recognized by long usage as harmless, or proved beyond question as not injurious."

The President: Gentlemen, it has been moved and seconded that all of the resolution following the word "manufacturer" be stricken out. Are you ready for the question?

Mr. Emery of Wisconsin: Vote by states.

The President: Gentlemen, a roll call has been called for. The Chair will state that a vote of "Yes" for Mr. Flanders' motion means that the latter portion of the resolution shall be stricken out. A vote of "No" means that it shall stand as written by the committee. Proceed with the roll call.

Alabama: 3 yes.

California: 3 yes.

Connecticut: 3 yes.

Idaho: 3 yes.

Illinois:

Mr. Bryan of Illinois: Mr. President, Illinois feels that the latter part of this resolution is going a little farther than we can see without more thought. It shuts out the possibility of a poor man, who has discovered a good food, putting it on the market, until he can enlist enough capital to prove that the thing is not injurious beyond question. Now it seems to me that the main principle for which we wish to stand is stated in the first part of the resolutions. We do not want to hurt a man, just because he is poor, who is putting something out, and who has gone through reasonable experiments to prove it is non-injurious, before presenting it on the market. I think the first principle announced there goes far enough. Illinois votes yes, with three votes.

Indiana:

Mr. Barnard of Indiana: Mr. President, as chairman of the committee that drafted the resolution, I believe I shall vote no, and I do vote no.

Iowa: No.
 Kansas: No.
 Kentucky: No.
 Maryland: 3 yes.
 Michigan: 3 yes.
 Minnesota: 3 no.
 Missouri: 3 yes.
 Nebraska: 3 yes.
 Nevada: 3 yes.
 New York: 3 yes.
 North Dakota: 3 no.
 North Carolina: 3 no.
 Oklahoma: 3 yes.
 Oregon: 3 yes.
 Pennsylvania: 3 no.
 Rhode Island: 3 yes.
 South Dakota: 3 no.
 Tennessee: 3 no.
 Texas: 3 no.
 United States Department of Agriculture: 3 yes.
 Utah: 3 yes.
 Washington: 3 yes.
 Wisconsin: 3 no.

The President: Gentlemen, the Chair desires to announce 54 votes "yes" and 30 votes "no." The motion is carried, and the latter part of the resolution is stricken out. The reading of the resolution will proceed.

Mr. Barnard of Indiana: "Whereas, This Association recognizes that the full effect of its service to the people can be secured only by such dissemination of information as shall enable them most effectively to protect themselves; and, recognizing further the public press is the most wide-reaching agency for the purpose; be it therefore

"Resolved, That this Association hereby expresses to the public press of America its appreciation of the valuable aid rendered in the past, and bespeaks for the future its efficient coöperation.

Respectfully submitted,

H. E. BARNARD,
 R. M. ALLEN,
 WILLIAM FREAR,
 JAMES FOUST,
 W. B. BARNEY,
 JOEL G. WINKLER,
 Committee."

For the committee, I move the adoption of the resolutions as amended.

The President: Is there a second to the motion?

Mr. Jones of Illinois: Mr. President, I second the motion.

The President: Gentlemen, it has been moved and seconded that the resolutions, as amended, be adopted. Is there any discussion?

All in favor signify by saying "Aye." Contrary, "No." The motion is carried, and the resolutions, as amended, are adopted.

RESOLUTIONS.

I.

RESOLVED, that the members of the American Association of Dairy, Food and Drug Officials, express to the Honorable George F. Cotterill, Mayor of this beautiful city of congenial climate and picturesque surroundings, to Honorable L. Davies, State Dairy and Food Commissioner; to the University of Washington, the Commercial Club, and to others who have joined in making our stay pleasant, our hearty thanks for their cordial hospitality.

II.

RESOLVED, that this Association express to Governor M. E. Hay and President Thomas F. Kane, its appreciation of their sympathetic and inspiring addresses, relative to the important work in which we are engaged.

III.

RESOLVED, that this Association expresses to the Committee on Co-operation, its hearty thanks for its efficient work, and urges the further development of its comprehensive plan for practical co-operation between the states and the Federal Government, in the enforcement of food laws.

IV.

WHEREAS, the National food and drugs act, under the decision of the Supreme Court of the United States, does not apply to false and exaggerated claims for efficacy of patent medicines, and,

WHEREAS, the usefulness of that law is thereby greatly restricted,

BE IT RESOLVED, that this Association heartily endorses the message of the President of the United States, recommending the amendment of the law so as to prevent the interstate shipment of medicines, which are falsely labeled as to their curative effect, and urge upon Congress the necessity for the early enactment of remedial legislation.

V.

RESOLVED, that this Association favors the amendment of the National food and drugs act, June 30, 1906, to compel the branding of the weight or measure upon all packages of food, and that we hereby reaffirm the resolutions adopted by this Association in annual meeting at New Orleans and at Duluth, favoring compulsory weight or measure branding.

VI.

RESOLVED, that this Association expresses its judgment that there is need for such amendment of the present National Oleomargarine Law, as shall strengthen it at points, where it has been found defective, and hereby approves the type of legislation set forth in the bill drafted by the National Dairy Union, to the end that both consumers may be protected from deception and honest producers from unfair competition.

VII.

This Association, realizing the need of an improved agriculture that will meet the conditions of an ever increasing food consumption, urgently recommends the enactment of such legislation as will promote the improvement of agricultural methods, and tend to the conservation of the land's fertility.

VIII.

WHEREAS, there are now being extensively introduced upon the market various products composed of skim-milk intimately mixed with added cream, butter or butter-fat, or other fats,

WHEREAS, these products are offered instead of normal milk and cream, both for direct consumption and for use as raw materials, in the manufacture of ice-cream and other food, articles usually made directly from milk and cream,

RESOLVED, that it is the judgment of this Association that these modifications of, and substitutes for, milk and cream, and also the food articles for whose preparation they are employed, instead of normal milk or cream, are not properly saleable under the commercial names of the corresponding normal food articles, but should bear designations clearly distinguishing them from said normal articles.

IX.

Recognizing the extent of the fraud in the manufacture and sale of adulterated linseed oil, this Association urges the enactment by the several states of uniform laws regulating the manufacture and sale of linseed oil, and further urges on the Congress of the United States the adoption of a law which will effectively regulate the shipment of adulterated linseed oil in interstate commerce, to the end that the consuming public and reputable manufacturers of linseed oil may be properly protected.

X.

WHEREAS, meat inspection is one of the most important phases of pure food work, and the experience of all nations has shown the need for protecting the people from the danger of contaminated, spoiled and diseased meat,

RESOLVED, that the National Congress be requested to appropriate the funds necessary to carry the blessings of the national meat inspection act into the widest effect, and that all states and cities be urged to provide a complete system of sanitary and disease inspection, for all meats exempt from Federal jurisdiction.

XI.

Recognizing the danger of the spread of disease by the medium of the food supply, and appreciating the fact that the passage of well designed sanitary laws has furnished adequate means by which to eliminate persons suffering from syphilis, gonorrhoea, consumption, and other infectious diseases from the ranks of food handlers, this Association urges the rigid enforcement of such legislation and the development of a practice of physical inspection that will insure sound, healthy workers with the food supply.

XII.

We affirm our adherence to the basic principle that the burden of proof of the harmlessness of substances used in foods should rest with the manufacturer.

XIII.

WHEREAS, this Association recognizes that the full effect of its service to the people can be secured only by such dissemination of information as shall enable them most effectively to protect themselves; and, recognizing further that the public press is the most wide-reaching agency for the purpose, be it therefore,

RESOLVED, that this Association hereby expresses to the public press of America its appreciation of the valuable aid rendered in the past, and bespeaks for the future its efficient co-operation.

Respectfully submitted,

H. E. BARNARD,
R. M. ALLEN,
WM. FREAR,
JAMES FOUST,
W. B. BARNEY,
JOEL G. WINKJER.

Mr. Allen of Kentucky: Mr. President, one or two members of the Association have spoken to me about that part of the constitution which provides that the vote for officers shall be by written ballot. At the Denver Convention, and at the Macinack Convention, there was a strong sentiment that all voting in the convention—especially as urged by the United States Department of Agriculture—that all voting should be in the open, and that no question voted upon by the Association, either in the election of officers, or anything else, that should come up should be voted upon in a way that men should not express openly what they thought about it. In order that this matter may come before the next convention, I offer an amendment to that article applying to voting, the following amendment: "That all voting in this Association for officers or on any other question shall at all times be by open ballot."

Mr. Judd of Oregon: Mr. President, wasn't there a resolution referred to the Resolutions Committee which they did not read to this body, a resolution that was introduced by Mr. Flanders? It was in regard to a paper that was read yesterday. It was offered by Mr. Emery, I believe.

The President: Mr. Judd, the Chair would reply to that, that Section 2 of Article 8 provides that "All resolutions shall be presented to the Association in writing, read by the Secretary, and referred, without debate, to the Committee on Resolutions, who shall report them to the convention with recommendations at a time to be provided in the program by the Executive Committee." The Chair would like the sense of the house as to whether the committee shall report out all resolutions with recommendations, or shall report only such resolutions as are, in its opinion, proper.

Mr. T. J. Bryan of Illinois: Mr. President, I made a motion last night that the word "them" in there be stricken out. The President: Mr. Bryan is correct. I had before me, when I read that section a moment ago, a copy of the old constitution.

Mr. Bryan of Illinois: The purpose of my motion was that the resolutions need not be reported back.

The President: Mr. Judd, the Chair is obliged to rule that the committee need not report back all resolutions submitted to them.

Mr. Judd of Oregon: Mr. President, if I am in order, I would like to say maybe a dozen words, and I would like to ask your indulgence. I never remember of running across that kind of procedure before. When the reading of resolutions and the action on them is eliminated from the house, and referred to a committee, it is only justice that the committee give us the benefit of a report. They can report ad-

versely or they can report favorably or some other way on them, but they should surely bring it up before the whole house, so that the house may express its opinion on it.

Mr. Allen of Kentucky: Mr. President, that was the understanding of the Resolutions Committee. If it is not clearly stated, it should certainly be clearly stated. As a member of the Resolutions Committee, I don't remember having had that resolution before the committee, and it may have gotten lost among the papers.

Mr. James Foust of Pennsylvania: Is the resolution in question the one that was presented in reference to a paper which was read by Mr. Wallis of Idaho? If that is the one, that paper was taken up last night, and the Committee on Resolutions never got it. It was an oversight.

The President: I remember referring that matter to the Committee on Resolutions.

Mr. Emery of Wisconsin: My recollection is that the resolution was submitted to the President, and he was requested to read it, and he got it out of order.

The President: The Chair does not so recall it. The Chair recalls referring it to the Committee on Resolutions.

Mr. Judd of Oregon: Mr. President, to all intents and purposes, that resolution is still in the hands of the committee, and has not yet been reported. I move that the committee proceed to complete its report.

Mr. Barnard of Indiana: I wish to assure the members of this assemblage that this committee has not left out any resolutions that were submitted. We reported all that were submitted to us. The chairman of the Committee on Resolutions knows nothing of any other resolutions. If there are any other resolutions in existence, the Resolutions Committee will be glad to go into committee and attend to them.

Mr. Wallis of Idaho: Mr. President, has the report of the Committee on Resolutions been adopted as amended?

The President: The report of the Committee on Resolutions has been adopted as amended. There was nothing before the house when Mr. Judd made his motion. I will see if I can find the missing resolution among the papers here on the table. The missing resolution does not appear to be here on the table.

Mr. Judd, have you made a motion?

Mr. Judd of Oregon: I have made a motion, but I don't know that it was seconded.

Mr. Foust of Pennsylvania: I seconded the motion.

The President: Mr. Judd, the Chair would have to rule that the committee's report has already been received and adopted.

Mr. Flanders of New York: Mr. President, I move that the Committee on Resolutions be discharged from further consideration of the resolutions, and that it be now placed before this body for action.

The President: Gentlemen, the Chair is distinctly of opinion that all resolutions must go to the hands of the Resolutions Committee. If he is mistaken on that, he would like to have arguments presented by persons who differ with him.

Mr. Flanders of New York: Mr. President, the constitution provides that all resolutions shall be referred to the Resolutions Committee. The constitution also provides that all questions of parliamentary procedure not provided for in this constitution or in by-laws adopted by the Association shall be determined according to Robert's Rules of Order. If any committee does not report one way or another on a matter, the body may move to discharge them from further consideration, and consider the matter themselves. It was in accordance with that rule that I made the motion.

The President: The Chair is of the opinion that Mr. Flanders is correct. You have heard the motion. Is there debate upon it?

Mr. Judd of Oregon: Mr. President, there is another motion before the house. With the consent of my second, I will withdraw the motion made.

The President: The Chair acknowledges the correction. All in favor of this motion will please say "Aye." Contrary, "No." The motion is carried. The committee is discharged.

The Chair now understands that the committee is to proceed to the consideration of this resolution, and before the body can proceed to the consideration of the resolution the resolution should be presented.

Mr. Flanders of New York: Mr. President, I would suggest that the mover of the resolution state the substance of the resolution which he presented. The resolution cannot be found.

Mr. Allen of Kentucky: Mr. President, I don't think we have that resolution in the committee.

Mr. Flanders of New York: I was laboring under the impression that the resolution had gone to the committee, as the Chair had directed that it should.

The President: The explanation is received and is due to the committee in justice to it. The resolution now remains to be read.

Mr. Foust of Pennsylvania: Mr. President, the resolution was gotten up and presented by Mr. Bailey of Oregon and he has gone home. Has anyone got a copy of it?

Mr. Allen of Kentucky: Mr. President, I move that it be the sense of this Association that the able paper of Commissioner James H. Wallis of Idaho be especially commended and recommended for publication in the press throughout the United States.

The motion was duly seconded.

The President: Gentlemen, you have heard the motion that the able paper of Commissioner James H. Wallis of Idaho be especially commended and recommended for publication in the press throughout the United States. Is there any debate upon the motion? If not, all in favor will signify by saying "Aye." Contrary, "No." The motion is carried, and it is so ordered.

Mr. Flanders of New York: Mr. President, in view of the misapprehension that I had labored under, I now move that the motion I made be laid on the table so as to get rid of it.

The President: The Chair believes that there is something of a tangle here. A motion in pursuance of Mr. Flanders' motion has now passed the house. Mr. Allen's motion was in direct pursuance of Mr. Flanders' motion. The Chair understood that Mr. Allen's motion was intended in lieu of the production of the resolution referred to, and therefore put it to the house.

Mr. Flanders of New York: If the Chair so decides, I will sit down and say "all right."

Mr. Allen of Kentucky: Mr. President, I remember now that there was submitted to us yesterday a paper, containing a resolution to the effect that the laws be amended so as to require no departure from the United States Pharmacopœia standards. As I remember it now, when we discussed it in the automobile, it was the general sense of the committee that the present form of the national law and the state law on the subject should be followed, for the reason that a material which might be accepted by medicine authorities of today as of proper strength might not be accepted in a few years. I ask that Commissioner Barnard, in whose hands the paper was left, bring that resolution before the house, as it was not, during the time I was with the resolution committee this afternoon, considered by us.

Mr. President: Dr. Barnard is requested to reproduce the sense of that resolution. Is that what you mean, Mr. Allen?

Mr. Barnard of Indiana: Mr. President, I recall the discussion of the subject matter of that resolution, but it was not my understanding at the time that the resolution had been introduced, or that it was presented to the Committee on Resolutions for consideration. If I may inquire of you, Mr. Allen, didn't you hand that to me, and ask me what I thought about it, and I thought it was some figment of your imagination? (Laughter.) I don't know where the resolution is. I think Mr. Allen got it.

Mr. Allen of Kentucky: Mr. Barnard, I think I said it was a southern fake.

Mr. Billingsley of Alabama: I introduced said resolution. It seems that the resolution is lost. Mr. Barnard said it would ruin the drug business. I know of a number of states in which the law now is as the resolution calls for, and the druggists in those states seem to be doing business. I will read the resolution: "Be it resolved, that the American Food—" (Interrupted.)

The President: Pardon me. I think, to be in order, you should put your words in the form of a motion that this resolution be passed. You can do so after you have finished reading the resolution. I merely desired to call your attention to that point.

Mr. Billingsley of Alabama: "Be it resolved, by the Association of American Food and Drug Officials that the Congress of the United States be requested to so amend the National food and drug law so as to require all drugs sold under or by a distinctive name recognized in the United States Pharmacopœia or National Formulary to conform to the standard strength, quality or purity as determined by the test laid down in the United States Pharmacopœia or National Formulary."

"Be it further, Resolved, that the President of this Association appoint a committee of three to bring the matter to the proper committees in Congress."

I move the adoption of the resolution so as to bring it before the body.

Mr. Judd of Oregon: I second the motion.

The President: Gentlemen, you have heard the motion, which has been duly seconded. Is there any discussion?

Mr. Allen of Kentucky: Mr. President, I would like to re-urge the objections I mentioned before, to this resolution. Notwithstanding the very excellent purpose of that resolution with respect to the United States Pharmacopœia pharmaceuticals, they have a fixed standard. There are a number of those pharmaceuticals that are being continually changed, and therefore, I don't think we should pamper the growth of medicine or the growth of pharmacy by adopting this resolution, and, furthermore, the adoption of that resolution, to my mind, would probably, in some states, raise some serious questions as to the constitutionality of the United States Pharmacopœia clause in the law.

Mr. Billingsley of Alabama: Mr. President, this is a matter that we are interested in down in Alabama. At the next session of the legislature, we will try to get our law amended to this effect. The doctors and the druggists have commended it. I don't care to inflict on this association a long discussion, so, with the permission of the Association, I will withdraw my motion.

The President: The motion is withdrawn.

Mr. Caspari, of Maryland: Mr. President, I don't know whether it is proper to say anything more about the subject, now that the motion has been withdrawn. I got up to speak just as Mr. Billingsley withdrew his motion.

The President: The Chair would suggest to Dr. Caspari that the motion is not before the House at this time.

Mr. Allen, of Kentucky: Mr. President, I ask the unanimous consent of the House for Dr. Caspari to discuss this matter.

The President: Dr. Caspari, will you please come forward?

Mr. Caspari of Maryland: I would like to say that, if I understood the resolution, as read by Mr. Billingsley, correct, it aims at the abolition of the sub-standard clause in the Federal law. Is that correct?

Mr. Billingsley: Yes.

Mr. Caspari: I have always personally considered that sub-standard clause a very weak point in the Federal law, and in all state laws where it occurs. We have, in our state law, a provision similar to that, with the exception that all preparation used in medical prescriptions must be of Pharmacopœia strength or the strength of the National Formulary; but where they are sold over the counter, the sub-standard clause prevails. In other words, a man could sell tincture of iodine over the counter with half strength, or he could sell any preparation, with the exception of the preparations of opium in Maryland. The law of Maryland specifically exempts opium from this sub-standard clause. In my own mind, I feel satisfied that at present, the Congress of the United States will not eliminate that sub-standard clause. Some of the state legislatures, perhaps, will, and I have strong hopes that in the course of a few years both the Federal Congress and all states will eliminate it, because it is not desirable in any state law. It is a weak point. I had a fight on that in our own legislature, and had to submit simply to a majority vote to keep it in there.

Mr. Allen of Kentucky: Will the gentleman yield for a question?

Mr. Caspari: Certainly; at any time.

Mr. Allen: What provision would you make in your law, in order that a dairyman or stockman, who does not want to pay a fancy price that is demanded for a preparation which is recognized by the Pharmacopœia? What provision would you make for a dairyman to buy, we will say, the crude product, which is perfectly all right for his animals, under the name that he has always bought it, without the necessity of having to pay the very fancy price for the refined product that this new provision of the law would involve? In other words, the point is this: There are well known, every-day remedies, that it is lawful and proper to use for our stock, that it is not necessary to have up to that degree of fineness that the Pharmacopœia sets for human medicine, and if you can sell them under the old names, why, how are you going to sell them? In asking that question, I have particularly in mind several pharmaceuticals that were taken up with the drug stores in Covington, Kentucky. The stockmen buy those as liniments and other things, for their horses. They buy those because of the fact that they are not United States pharmaceuticals. I don't mean diluted products, but products that have not been refined up to that fineness required by the Pharmacopœia. Take copperas, for example. What would be the remedy that stockmen could buy under

the old name, and what necessity is there to refine them, up to that degree of fineness that would cause them to pay so much more for them?

Mr. Caspari: I should say that all drugs recognized in the United States Pharmacopeia, whether intended for man or animal, should be of the quality required by the Pharmacopeia. Without exception, a horse or dog is entitled to the same perpetuity as a man, at any time. Stockmen don't want to buy aconite, or bella donna, say, at half strength. The stockman does not know whether it is full strength or half strength. If a veterinarian prescribes bella donna or aconite for a horse or cow, he should have it up to full strength.

Mr. Allen of Kentucky: How about copperas?

Mr. Caspari: Copperas is not in the Pharmacopeia at all.

Mr. Allen of Kentucky: Is it not the case, Dr. Caspari, that the additions made to the Pharmacopeia are now seriously considering the letting down or the amendment of some of the tests that would require such a high degree of refinement, with respect to the number of chemicals? I will not mention any of them.

Mr. Caspari: That remedy will come when the Pharmacopeia is completed. If the Pharmacopeia should lower the requirements, say, from 90 to 95 per cent., or from 95 to 92 per cent., it will never be very marked.

Mr. Allen: Since the Pharmacopeia is to be for ten years, why not perfect it on a label?

Mr. Caspari: Not at all. It opens the way for imposing either upon the ignorant, or for enabling a designing man to impose upon his customers. The public at large are not familiar with the requirements of the Pharmacopeia. At present, if the Pharmacopeia requires, for instance, four-tenths per cent of a certain ingredient, and it states on the label that it contains three-tenths per cent, what does the consumer know about that ingredient? He buys in good faith, thinks it is a reliable product, and uses it as such. It opens the way partly for deception on that side, and partly for commercial fraud on the other. I think it is a very weak point in the Federal law. I have always contended so, and I shall continue to contend so. As I have said, I am

in hope that the Congress of the United States and the legislatures of the various states will abolish it.

Mr. Billingsley of Alabama: Mr. President, I would like to ask Mr. Allen a question.

The President: The Chair does not understand that anything except unfinished or miscellaneous business is before the house, and he does not understand that questions are in order at this time. We are about finishing up our work, and most of us are anxious to get away. If the gentleman desires to make a motion, it will be in order.

Mr. C. H. Billingsley: I desire to state that I think all members are entitled to the same privilege.

The President: The gentleman is out of order. There is no motion before the house.

Mr. Billingsley of Alabama: I understand that we have had several talking on the floor since there has been no motion before the house, and all members are entitled to the privilege.

The President: All members are entitled to the privileges that are asked for, and nothing else.

Mr. Foust of Pennsylvania: I desire to make a motion that the Secretary keep in some safe way, in the future, all resolutions, so that they will not be lost.

The motion was duly seconded.

Mr. Allen of Kentucky: Will the gentleman accept an amendment,—that they be transmitted to the Resolutions Committee.

The President: The Chair is not sure whether that is really in order. If the gentleman is in earnest, the motion will be put.

Mr. Jones of Illinois: I move that the motion be laid on the table. (Duly seconded.)

The President: Gentlemen, it has been moved and seconded that the motion be laid upon the table. All in favor of this motion will please say "Aye." Contrary, "No." The motion is carried.

Upon motion, duly made and seconded, the meeting was adjourned sine die.

(The meeting was adjourned at 10:45 o'clock p. m.)

Official Proceedings

Section A—Association of State Food and Dairy Executives

TUESDAY, JULY 9, 1912.

2:00 P. M.

The Chairman: The hour having arrived for the annual meeting of the State Associations of Food and Dairy Executives, we will now take up and proceed with the program. The first order of business is the annual address of the President. I would also suggest that we get as close together as we can so there will be no trouble in hearing.

ANNUAL ADDRESS OF THE PRESIDENT OF THE ASSOCIATION OF STATE FOOD AND DAIRY EXECUTIVES.

Members of the Association of State Food and Dairy Executives:

In opening this third meeting of our Association, it is not needful that I occupy your time with any elaborate address upon the general work of this Association, nor is it my purpose to bring to your attention, at this time, any special topic for your consideration. It may, however, be appropriate to dwell very briefly upon the importance and distinctive character of the subjects for whose discussion we have come together.

Food and drug control executives are charged with very grave duties in protecting the consumers' health from injury through the very substances upon which they depend for the upbuilding and repair of their bodies and for their defense against the attacks of disease, and the consumers' pocket-books from numerous thefts that are individually small, but, taken together, add up into very large amounts.

The general food laws have imposed upon us the duty of exercising very delicate judgments. I say "delicate" not only because of the great variety of the subjects with which we must deal, but especially because of the close supervision we are required to keep over the details of manufacture and sale of foods and drugs. Our people, accustomed to great freedom

of action and always impatient of governmental interference with private affairs, find it hard to realize that the food and drug manufacturers are not engaged in purely private work, but are, in fact, performing distinctly public service.

Our problem is, to keep in touch with what they are doing, to help them to realize their responsibilities to the public, to restrain them from acts contrary to the laws we are sworn to enforce, and to do so in the manner, and at the same time most effective and least obnoxious, avoiding as far as practicable, such kinds of interference as tend to unduly hamper and discourage the trade in the performance of its proper and important service to the public.

In our work, new problems are constantly arising. Some of these problems belong to our experts, our chemists, microscopists, drug experts, and legal advisers; some are so broad in their relations that they can best be discussed by all branches of the service in common; but there are many that are purely executive, for whose solution we alone are responsible. Such problems are those of making a small force most efficient in service, securing the largest good with the least cost to the State, guiding the educational, as well as the police divisions of our work, keeping the interest and confidence of the public we serve, securing the cordial coöperation of the fair-minded men in the producing and selling business, making our control effective with the least interference with legitimate trade activities.

The program arranged for this meeting includes topics from whose full and free discussion I am sure we all may profit, and we shall, I trust, carry back to our work many helpful suggestions from their consideration.

The Chairman: I will ask Commissioner Wallace of Idaho to act as Secretary. Mr. Saunders is not here. I will say just for your convenience, if you do not have a program, I have some here that you can get a copy of. It seems to me before we talk we will act on the report of the Secretary next,

if we have his report here. I do not have it. How about the report of the Treasurer, shall we pass it?

A Delegate: Who is Secretary?

The Chairman: R. M. Allen of Kentucky. Now, I think the Association right here might as well decide one question. I see that the official program has cut out tomorrow and Friday for this Association, and it seems to me for a proper handling of these subjects we ought to settle this whether we are going to follow the program here for Tuesday, Wednesday, Thursday and Friday. It does not seem to me—pardon me, if I say a word—we came here, and I am sure if we spend all this money to come across the continent, we ought to keep right at work, and not follow this program, or are we going to follow the order of the program and each subject, and whether we are simply going to carry out the three subjects of fifty minutes, or an hour, and get the good we should be able to derive, or shall we undertake to do this work here this afternoon? What is the pleasure of the Association?

Mr. Brown of Tennessee: Mr. Chairman, as Chairman of the Executive Committee, I think a statement is in order at this time, I mean of the Executive Committee of the general association. When your committee of the general association



JAMES FOUST,
Dairy and Food Commissioner of Pennsylvania.

undertook to get up a program for the general meeting, it was confronted with the probability that there would be four meetings in session at once; in other words, that we would have to engage four expert stenographers, for taking reports of each section of the general Association. I might say that it was my own impression that that would be absolutely necessary, and we would have to make a provision of that sort, but on investigating the methods of keeping and taking the proceedings of the Association, it was found that it would be an extremely expensive matter to take the proceedings of four meetings; that there are two numerically strong sections in the body. Those were the Section of Analysts and Section of Executives. The Section meeting on Thursday that concerns us all is one in which we haven't a great many members—

corresponding to the daily sections, numerically weak, especially those of us from the eastern states, who are without experts. We have daily work which would be entirely secondary. It was therefore suggested that we could compress proceedings into single sections, and get two long meetings during the week, and we could, on the intervening days, have two short meetings for the sections, when not having a large attendance. For that reason the official program was made up as you see it. Now, when we made arrangements for the making of the program, there were two meetings each day. I don't know whether it is proper for the Executive Committee to decide. If this Association holds four meetings, I don't know what arrangements could be made for taking the proceedings, which are not provided for in the program. I mention these matters for your consideration merely as throwing light on the problem which you, Mr. Chairman, suggested.

Mr. Flanders: I will attempt to make a suggestion that we start with the program and proceed, and if we do not have time, to limit the time, if we should come to a discussion. We have come a good way, and we want to hear all that may be said for enlightenment on these subjects.

The Chairman: I think we will proceed with the program.

Mr. Brown of Tennessee: I would like to add one suggestion to those I just suggested; that is, it was suggested in the executive counsel meeting, if it became necessary at any time for any section to exceed the time period, that that meeting could be carried on into the evening, and that would fit into Mr. Flanders' suggestion. That would allow you to give as much time as necessary for the consideration of these important matters, and would, at the same time, not conflict with the time set off for any other section.

The Chairman: If there is no objection, we will just take up the program, and see how we get along.

I will say that Dr. Woods is not here, and Mr. Brown will read his paper:

**"SHOULD AN EXECUTIVE OFFICER HAVE THE
RIGHT UNDER STATE FOOD LAWS TO
INSTITUTE EXECUTIVE HEARINGS
TO DISPOSE OF CASES OF
VIOLATION WITHOUT
REFERENCE TO
THE COURTS?"**

By Charles D. Woods.

I am sure that there is substantial agreement among all people that the chief object to be aimed at in all food legislation and its execution is the protection of the public, and as a corollary that this should be accompanied by as little disturbance to trade as is consistent with full protection to the public. I also think that with the exception of possibly some food executives themselves the proposition is equally clear that the convenience of the executive is not to be considered in any way in the execution of the law. Viewed from the standpoint of the executive alone the strictly police law that has been adopted in quite a number of states is without question the easiest and safest for the executive. In those states whenever a violation of the law is found the executive merely considers whether he has or has not sufficient evidence to make a conviction. If he has evidence to make a conviction the case is brought into court; if he thinks he has not the evidence, the case is dropped. If he has sufficient evidence, it may happen that a person who is technically guilty and is morally innocent of any wrong doing is given a criminal record in court and a very unfavorable notoriety in his own locality. The cleverer man who may be a rascal, but has conducted his adulteration and misbranding in such a way that he is technically outside of the law, or in such a way that the executive can not obtain court evidence, may go free without any publicity as to his mistakes or wrong doings.

In the national law, primarily for the purpose of protecting the dealer from undue notoriety, the Secretary of Agriculture, whenever the Bureau of Chemistry reports a violation of the food and drugs act to him, is directed to give a notice of the findings to the suspected person. The person so notified is given an opportunity to be heard in his defense. This principle has been enacted into most of the state laws that are at all analogous to the national law, and read something like this: "When the executive officer of the law becomes cognizant of the violations of the provisions of this act, he shall cause notice of such fact, together with a copy of the findings to be given to the person from whom the sample was obtained and the person whose name appears on the label. The person so notified shall be given an opportunity to be heard under such

rules and regulations as may be prescribed by said executive officer. Notices shall specify the date, hour and place of the hearing."

A provision analogous to this has been in force in Maine for seven years. The few thoughts that I have to bring at this time are based upon my experience as executive officer of the law under this proviso. Whenever there is apparently a violation of the Maine food law, whether this is shown by laboratory analysis, by the report of the inspector, or in whatsoever manner the information may reach us, I appoint, under this section of the law, a hearing. In the notice of the hearing which is sent to all of the parties interested all of the essential points of the evidence in my possession is given. This is accompanied by the statement: "As directed by the law I hereby give you an opportunity to present evidence before me on (naming day and hour). The hearing will be private and will be held in (place of holding the hearing is stated). Its object is to give you an opportunity to establish your innocence. You can appear in person or by attorney. If you prefer you need not appear and may present the testimony by letter any time before the date above named. In case you do not care to present any testimony I shall proceed to determine the matter upon the evidence now before me."

These hearings are private. The matter is given no publicity whatever. It is a matter resting entirely between the executive of the law and the parties concerned. Hence the executive does not have to consider whether he has or has not evidence for conviction. Whenever the law is seemingly violated the hearing is appointed and the parties concerned are told what the trouble is, and are given a full opportunity for explanation. This brings it about that many trivial violations of the law, which one would not feel justified in going to court with, and which a judge would be quite likely to throw out as being irrelevant or trivial, can be taken up at a private hearing and brought officially to the attention of the parties concerned. In my experience, in more than 99 cases out of 100, such trivial violations are thus corrected. Speaking out of an experience of many hundreds of hearings, I have never had any hearing at which there was any fault found by the parties accused, because attention was brought in this way to their violations of the law. And I have never found myself in any way impeded in the prosecution if the case seemed to be such that would require prosecution for the protection of the public.

While this provision of the national law was first introduced not for the protection of the public, but for the safety of the dealer and manufacturer, I am convinced as the result of my experience that no greater safeguarding of the interest of the public is anywhere to be found in the administration of the law than is given under this proviso which allows for private hearings to be held before the executive; I feel very confident that every executive who has the hearing proviso in his law will agree that it is a most wise provision both from the standpoint of the honest manufacturer, the dealer and the consuming public.

There seems to be another phase involved in the topic which is assigned to me, and that is a disposition of cases of violation with reference to the court.

So far as I know no law which has the hearing proviso in it contemplates the disposition of cases of violations without reference to the courts. The hearings are appointed to give the accused an opportunity to establish his innocence. If he fails to establish his innocence it is still the duty of the executive to institute proceedings in the proper courts, either directly or through the law department of the state. In the great majority of instances executives use more or less of discretion as to whether they do or do not bring a prosecution. Even in the states in which it is the rule that prosecutions should be brought, there are doubtless occasions when the public service is better cared for without prosecution than with prosecution; particularly is this true in the case of technical violations of the law.

In the execution of the Maine food law, the writer has exercised a large amount of discretion relative to prosecution, and has attempted to enforce the law more along educational than punitive lines. He may exercise discretion in the matter of prosecutions, but has no discretion relative to publicity. Consequently the violations of the law which are found are published irrespective of whether prosecution follows or not. It has been the policy in the enforcement of the law to take up matters no faster than they could be thoroughly investigated. Whenever a new subject has been taken up the lines have been drawn far less rigid than after one or two years. That is, in the enforcement of the law, attempt has been constantly made to make the requirements higher and higher. Matters which were tolerated when investigations were first

begun would be quickly followed by prosecutions later. After dealers and manufacturers have been thoroughly informed on a certain line of goods they are no longer dealt with leniently, whether the violations arise from criminal intent or from carelessness or indifference. More or less similar discretion has doubtless been exercised by each executive present. But to make the executive of the law both judge and jury would be a dangerous proceeding, particularly in the states in which the executive is a political officer, either directly elected or appointed by a political party. It might be less dangerous in the few states in which the executive is appointed by a non-political board, as the trustees of the state university, or the state board of health, provided they are entirely out of politics.

To sum up, the writer believes that under the state food laws, the executive should have the right to institute executive hearings, both for the protection of the public and for the protection of the manufacturer and the dealer. It is doubtful if he should have definite authority given him to dispose of cases of violations without reference to the courts, as that would place altogether too much arbitrary power in the hands of one person.

Mr. Flanders: I would like to say, this morning, we had difficulty in hearing some of the members, and the President's address.

The Chairman: I would suggest we get as close together as possible.

Mr. Brown of Tennessee: Now, gentlemen, this is a very important subject. There are several states that have this provision in their law, and there are many states that do not have it. Now, let us be real spirited, and let us go right after this subject, and out of it we will get a great deal of good.

Mr. Jones of Illinois: Mr. Chairman, on that feature we tried it several years; it was like our bill, and it was very unsatisfactory. Illinois is a state that is 400 miles long, north and south, and our office is located in Chicago, the northeast corner of the state, and all hearings are sent out, and we send inspectors, and we have a central laboratory for having the analyses made, and we would discover a sample was illegal, we would send it to the State's Attorney to have it prosecuted, and as a consequence we had nearly half of the dealers of the state that were finding fault with the department and the law, and after we got this written into the law, and since that we now have a hearing, just as Mr. Woods says they do in Maine. The parties come in at a day and hour fixed. If they do not wish to do that, if they have a satisfactory excuse, they set it forth in an affidavit; that is such facts that satisfy us there should not be a prosecution, as in such matters as labeling or some coloring matter of fruit which is not very serious. Of course the commissioner must say at once whether there is a case, under the criminal law; we do not prosecute, but simply summons, which is quasi-criminal in form. If it is a case that where food shows up by physical test that it is illegal, we use our judgment as to what course to pursue. We have tried it now five years in Illinois, and we have scarcely any trouble at all, therefore the people are satisfied. They come in to hearings, and we, if necessary, prosecute them. We do not have nearly half the prosecutions, and we do not have the failures we had before. If you take the cases we prosecute, very nearly every case that is prosecuted we are successful in, where before if it was some technical matter, we would fail. There were a few things that might come up that would excuse the party before a jury. All those things we take into consideration, like a justice of the peace, under our law, and I suppose they are in all cities, they determine whether the party shall be bound over to the grand jury or not, whether it is that kind of case. We give the notice in that way, and it saves the parties a great deal of expense, and it saves them in their reputation. Here is a man or firm that has been in business for a half or quarter of a century—we will say a quarter of a century, that is a long while—and he is building up a business, and he has a reputation and a great amount of money in that business. We, as food officials, know that there is just as much honesty among manufacturers as other classes of people, and where a corporation has for years and years been building up a reputation, they do not want it understood that it is not all right to give them a hearing. These hearings are not public, they are private, and nobody is allowed access to them, unless they are members of the Legislature or some parties that are entitled to admission, like from Washington. The hearings are secret, not given to the public, but we keep a record of everything that is said and done. It is taken down in shorthand. Like all other parties,

we are under the Legislature and the Governor, and anybody that has a complaint can go to the Governor and he will call us in. We have never had that done, but I have known of it in other states. We have a record of every hearing, and it is the most satisfactory way, and it saves a world of expense and it preserves the reputation of the honest manufacturers. We always, or nearly always, go after the dishonest dealer, and when I speak of one, I speak of all of them, and I think it is the duty of the food commissioner to protect the honest one just as much as it is the duty to punish the dishonest ones, and it is a duty to the consumer and the people, the honest manufacturer and the honest retailer, to stand back of him like we would a stone wall, and if he does that, he will not have very much trouble, I think, in the enforcement of the law. It works admirably in Illinois, and for that reason, I feel very kindly toward the paper written by Dr. Wood, and I believe it contains my sentiments.

Mr. Cutler of Missouri: In Missouri, the law authorizes the commissioner, in holding a hearing, to swear each witness. That has a very good moral effect on the witness, or party most interested, because, not knowing the scope of the law, he is very careful to tell the truth, and the whole truth. I have very frequently, in consequence of that, while the hearing is *ex parte*, found that the witnesses will tell everything they know, especially if it happens to be a clerk in a shop, all of which is made a record of, and very frequently they come forward with the excuse first that they did not know that they had broken the law, and did not want to break the law, and would do anything to comply with the law, and usually he has been given opportunity to settle the case within a day or two, and while not having the ability to impose a fine, the law says when a man is found guilty, if he is prosecuted regularly, that he, among other things not only must pay the fine, not only serve a sentence in jail, but he must also pay the costs of an analysis, and so I say kindly to the party interested, "Now, you realize that you have broken the law; you have, in fact, testified to that fact. Would you be willing to pay the costs of the analysis in the event the prosecutor would be willing to take that sort of a plea, and save you the publicity of a prosecution in due course?" And they are only too glad to do that, because that will end the case. When the case is submitted to the prosecutor, that recommendation is made, and they most always come forward and pay the fine. There is another matter I believe is important. This being an *ex parte* hearing, the witnesses are allowed to say as much as they please, and how they please, and it is taken, and this testimony is submitted to the prosecuting attorney, and he has in his possession all the facts that he could not get any other way.

Mr. Bailey of Oregon: I know, in Oregon, we would waste a lot of time. Ninety-nine times out of 100, every man, when we get the evidence, is guilty of just exactly with what we charge him. Mr. Jones makes the distinction between the honest and dishonest manufacturer. We do not see any difference. When a man is found adulterating his foods and selling his products, we do not look upon him as being an honest manufacturer any more than anybody else. My experience in fourteen years or more dealing with law breakers is that they would say: "Bailey will give us a hearing, and we will go on until we are called up." Now, we don't very often do that. My deputies gather in samples and sample cases into the office, and what is the use of giving the owner a hearing? What is the use of swearing out a warrant when he comes up and pays his fine? When those laws were new, there might be some reason for using some leniency and some discretion, but after years and years and they see such publicity given this work, I cannot see any sense in shielding a dishonest person. We publish a record of the men prosecuted, and what they are prosecuted for, and the result of the prosecution. You get them, Mr. Foust, and Mr. Wallis, and the best effect we have is from the publishing of these bulletins. When we first started in, there might be some excuse for letting a man go. After all these years of publicity of these laws—and 99 times out of 100 an accused dealer has no excuse to offer, except to dodge the publicity—he doesn't want it published that he has been prosecuted for selling adulterated products, and that is just what we want the people to know. I disagree somewhat with Dr. Woods' paper, and some of the commissioners giving these people so much time.

Mr. Brown of Illinois: Did you ever have hearings under your law?

Mr. Bailey of Oregon: Yes, they come to us when they are arrested.

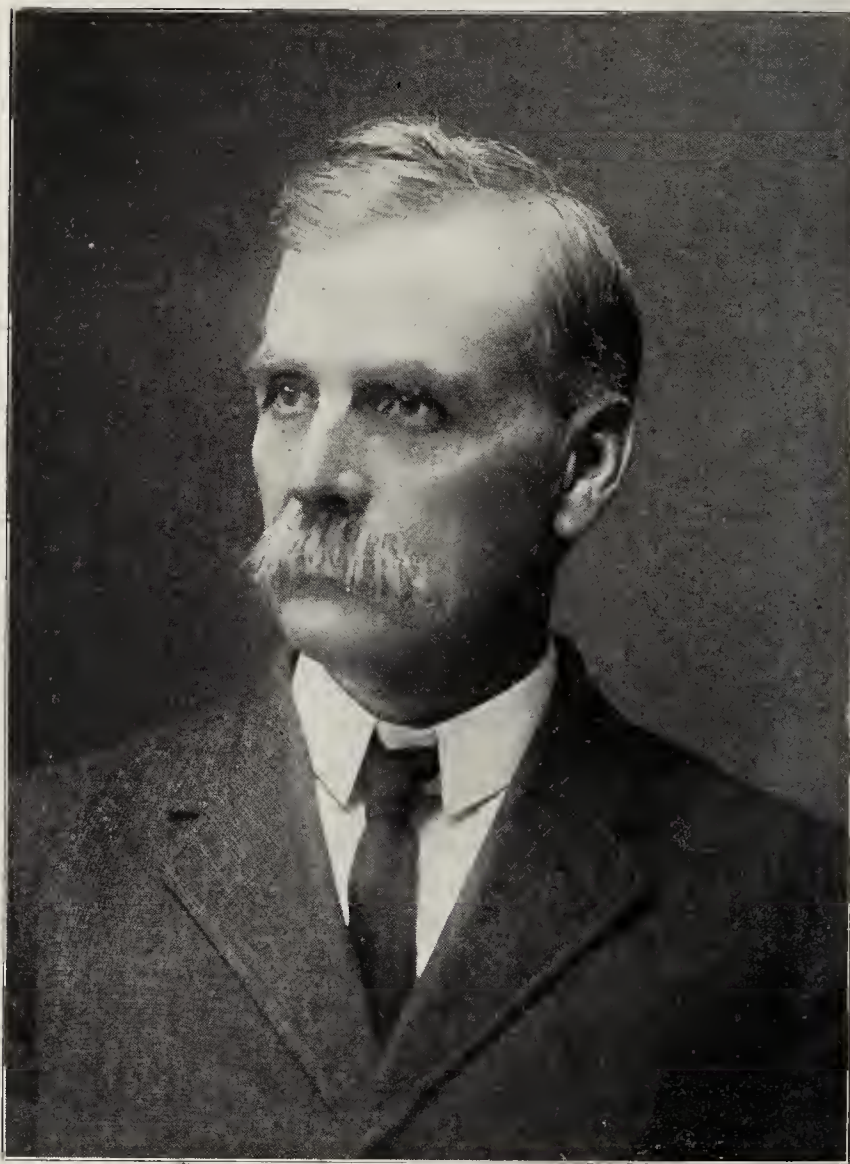
Mr. Jones of Illinois: Did you give them a hearing?

Mr. Bailey of Oregon: Yes.

Mr. Jones of Illinois: Do you have a law providing for it?

Mr. Bailey of Oregon: We have no law requiring that we shall give them a hearing, but nine times out of ten when they are arrested, they will come for a hearing. We will give them as long as they want, but they will convict themselves before they go a great ways, and they will say they did not know so and so, and so and so. That is the sum and substance of the hearings, and that is what they come for. They don't come to the hearings saying, "We did not know it," because they know it; they come to dodge the publicity, and that is just what we give them.

Mr. Potter of Connecticut: We have a similar law in Connecticut, and I think it is a very satisfactory law. I know that I have a good many hearings, and I will agree with what Brother Jones says, that there are a good many cases satisfactorily explained at those hearings, and the cases go no farther. We have practically no manufacturers of food-stuffs in Connecticut; they are very few at least, and my work of enforcing the pure food laws is directly with the retail grocers in the retailing of products, and the retailers in good stuffs. Now, many times, dealers will get stuff that is not properly labeled, that is adulterated in some way or other, and he comes into this hearing and explains to my



J. W. BAILEY,

Dairy and Food Commissioner of Oregon.

satisfaction that he did not know he was violating the law, and knew where he got it, and I give him more or less advice. I advise him in the future to get a guarantee on every bill of goods he buys, and I am certain that the dealers in Connecticut are very much satisfied with this provision in the law, and that there would be a strong kick against repealing the law. I have my stenographer take down hundreds of these hearings, and many times at these hearings I am able to decide in my own mind whether the party ought to be prosecuted or not, and if the case is prosecuted the notes taken at that hearing are of much value and of assistance to the prosecuting officer. I do not quite agree with my friend Cutler from Missouri that he should have the right to charge up a fine.

Mr. Cutler of Missouri: I did not mean to say or mean to intimate that we had a right. It is a mere matter of suggestion. I say: "Are you willing, in case the prosecutor does not prosecute this case, to pay the costs of analysis?" I could not possibly invoke it. I say I make the recommendation to the prosecutor.

The Chairman: May I ask, if there be no objections, if there is anybody put in a false light, they can make a statement.

Mr. Cutler of Missouri: I do not think any commissioner should assume the right to impose a fine at that hearing. The purpose of the hearing is for information, to receive information, for the party who is personally interested, to receive information and divulge information, and that information is of value to the commissioner, especially if the case is going to be taken into the courts.

Mr. Jones of Illinois: One reason we fine them in our state, is, we have a guarantee clause in our law, and the retailer that has a guarantee from the manufacturers, if in the state and responsible, is exempt from prosecution, and it would be necessary under our law, and we find in, I will say 75 cases out of 100 we prosecute, the manufacturer pays the costs, and he is called in at once. The notice is sent to the manufacturer at once, and also to the retailer.

Mr. Wallis of Idaho: I wish to offer a motion that the speeches, whoever wants to discuss the question, be limited to five minutes, and that nobody interrupt until they have been heard.

The motion was duly seconded.

The Chairman: It has been moved and seconded that each speaker be allowed five minutes, and nobody will be entitled to the floor until they have spoken. All in favor of the question say "Aye." The motion is carried, and it is so ordered.

Mr. Wallis, you have the floor.

Mr. Wallis of Idaho: In Idaho, we have no provision of law such as has been incorporated in some of the states mentioned this afternoon. I have considered the advisability of amending our law on the hearings held by the commissioner, but I have never found one good reason why we should give hearings to violators of our law. The commissioner, himself, has discretionary power. I do not believe a commissioner should be arbitrary and prosecute every violation of the law. I believe he should use his discretion. I believe that he should use his discretion and be alive about bringing into court people who are sometimes not strictly guilty of violating the law. If a commissioner has that discretionary power, I do not see what more power he has if he has hearings, consuming time, putting people to expense, and another feature that does not appeal to me, and I haven't heard one argument in favor of giving private hearings. Why give private hearings to people who are summoned to answer to some violation of the law? Why should they have this secrecy thrown around them? I haven't heard one argument, or read one article in support of the law where the states have this provision. Another thing, I do not know how it has appealed to you, but it seems to me that these private hearings give ground for a whole lot of suspicion on the part of other people that the accused were guilty or they would not be brought into the office of the commissioner; they don't know what of, but there was some reason for it. I make these suggestions for the purpose of argument of those from the states that have this provision of the law. If it is a good provision, Idaho wants it. We have followed in the wake of some of your states, because of the extensive experience you have had. We have amended our laws 100 per cent. If this is a good provision Idaho will adopt it at the next session of the legislature, but I haven't heard an argument that recommends it to me.

Mr. Caspari of Maryland: We have a provision in Maryland, somewhat different from that obtaining in other states. The commissioner has no exclusive authority to decide cases or give hearings. He has been employed for the administration of the law, but the State Board of Health has final disposition of the law. Hearing must be given to the supposed offender, and on the strength of that, the State Board of Health passes a regulation, which formulates the manner in which the hearing shall be conducted by a Board of three, the Secretary of State, the State Prosecutor, and the General Counsel to the State Board of Health. The violator is sent a notice that the article has been purchased from his store, and is adulterated, and shows the presence of sulphur, or something of that kind, and opportunity is given the man to make an explanation, and if he can't come personally, to make that explanation, by letter. The board of three men take this case under advisement, after the party is excused and decide whether to recommend further action, or recommend whether no further action be taken; in other words, it is sort of a jury of three sitting on this case, and on the report of these three, the State Board of Health takes action at its meeting. If the State Board of Health orders prosecution, it is prosecuted, and it is sent to the proper county of the state. The supposed offenders have a right to question the analyst's report and attack the charge in any way he pleases. The object of having a private

hearing, and this has been referred to this afternoon, is to protect, as far as possible, the man against unjust publicity. It may be merely a technical offense. Our law is recent, comparatively, having gone into operation in 1910, and since then we have had 1,400 hearings. Last week we had in one day 82 hearings.

The Chairman: What per cent do you prosecute?

Mr. Caspari of Maryland: A very small percentage, but I feel we have done a vast amount of good by educating the people to the fact they must live within the law. As far as I am able to learn, the course that the State Board of Health has pursued is meeting with hearty response on the part of the dealers. We have no paper referring to the advice to be given to the people. Unfortunately with us, we have to send everything to the State's Attorney. Our dockets are crowded. We can not do as they in Pennsylvania can do, take up the men, and make them pay their fines.

The Chairman: We do like they do in Oregon.

Mr. Caspari: You are more fortunate. In Maryland, that is not the case.

Mr. Hansen of Utah: In the State of Utah, we have a State Pure Food Bureau. We have a board consisting of five making regulations, governing the disposing of food and also to give instructions. We have found some cases like Mr. Jones has said, that these hearings have a good effect, but in all cases, it does not have a good effect. One time we were called in when the cases were coming up for hearings, and I noticed they took advantage of this, some five or six months, and so we cannot continue along these lines, and give a hearing. In strict violations of the law, we do not call a hearing, until we discuss it, and the commissioner is permitted to file complaints for such as the adulteration of milk, skimmings, etc. I find in the incoming of the new law, the score-card system we have adopted these hearings, have a good effect in an additional way. Take where we find a sediment in the milk—over 90 per cent of the milk throughout the state will contain a sediment. Our law does not allow of sediment or dirt or filth in milk, whatever, yet if we issued complaints, we would cause a great injury. We call in the dairymen and have discussions, and we feel we have created a great deal of good in the dairy line, and I believe in the hearings when discretion is used, but I believe in some cases, it is best to file a complaint, and give them a hearing, but our hearings are all in public.

A Delegate from Oregon: I am looking more for information than anything else. I can't exactly see what necessity there is for such laws. I wonder if there is a commissioner here who has not already had such hearings, and does not have them whenever he feels so inclined. Mr. Bailey I do not think will deny that he has hearings every now and then, although the law does not compel him to. The point I make is this: Is there any legislation necessary ordering a commissioner to hear or not hear? He certainly can. If he knows somebody is doing something immoral, can he not under the law, call the man in and talk with him? What Mr. Wallis said about the secret meetings appeals to me. I can't see how we will harm the man, how a dealer or manufacturer can be harmed by the meetings we have, if the man is innocent. The more publicity he has, the better, and the public will know about it. They will say: "Smith was called in by the Dairy and Food Commissioner. There was a prosecution, I don't know what was wrong, but there was something rotten in Denmark." If you are going to have these meetings, for Heaven's sake, don't have them private. Let the newspaper man come in if he wants to. If the man is not guilty, he is not harmed, and is vindicated.

Mr. Barney of Iowa: I am beginning to think I have had some hearings in Iowa. We have no law of that kind. We have a sort of a card system, a stub made out like a check book with a card on the end that we tear out and the inspector goes out and makes a report of the facts, and generally recommends on this card, whether the case shall be prosecuted or not. Now, I will say that in a general way, it is up to the inspector as to whether I make prosecution, because it is entirely up to him under the report he makes, other than on the card, whether I recommend a prosecution, and send it to the county attorney for prosecution. It is my belief, there is no line of work that men can use as much good horse sense and common judgment, if they do it, as in this line of pure food work, and we very generally try to pass judgment on these things, and if we think it is necessary at all, we ask the party or offender to come to the office, or to report to us by letter. After this report is made, we decide as to whether we will prosecute or not. If we make a prosecution, then I mark that card "Prosecute" and then the papers are prepared,

and we start the prosecution. Now, take it in very many cases, for instance in the city of Des Moines, which is the largest city of the State. We prosecute the proprietor of a dirty butcher shop, and the man comes to me, and explains why he should not be prosecuted. If I make up my mind that the inspector has been a little careless in making the inspection, or that he has not used good judgment, I make a second inspection to investigate the matter. After making the investigation and talking with him, then I recommend possibly, that the case be prosecuted. Now, I do not feel that we have any necessity, the way the law is working, for those hearings, other than they are given under our present law, and we have as I say, no such provisions.

Mr. Flanders of New York: In New York, we have two kinds of hearings, one provided for under the statute, and the other one not specifically mentioned but exercised. The one mentioned under the statute provides you shall issue a subpoena and call in the person, or his assistant, and put him under oath. Now, I think that comes under that clause: "Shall we have a right to have hearing?" That is, forcibly call them in and make them testify. We never use that against the offending parties, where it could be used against them. If the man goes and markets his product, we are morally certain he is the man that had the goods, but we are not morally sure that he shipped them. We, to make our chain of evidence and correct the case, have power to subpoena other persons, and shape the evidence, and in our judgment it is a good provision of the statutes. If we did not have the power to do that thing, it would not fall within your question. We have no power to enforce the hearing, but we do give the individual the right to appear and present any evidence in whatever way he may see fit, by his attorney or neighbor, why an action should not be brought, or deferred, and if he sees fit, he can settle the matter then and there without suit.

As to that one point, in discussing this afternoon, the question of fines, you understand that is not so in a criminal case, he has no right to do that. It must be placed before the court, and our statute provides for a penalty. The penalty is collected by civil action. You can settle a civil matter. The question arose twenty-four years ago in our state as to whether the Commissioner had a right to accept a penalty provided for by the statute, or whether we had to put the matter in the hands of the court to be paid. Our Attorney General became the judge of last resort, and he said the penalty in the statute is provided for the person violating the statute. The statute provides a further penalty to be assessed and collected. If he sees fit to pay the first penalty, then he should not be subjected to the second penalty. We give the people notice to show us why they should not be prosecuted. If they come in and settle, we say he should not be subjected to the second penalty, and for our own protection, we ask them to give us a draft payable to the attorney general.

Mr. Jaffa of California: I was going to say in our state, as emphasized by Mr. Jones, and others, it is working very satisfactorily with us. Our law requires that there shall be a hearing in all cases, and if the evidence is sufficient to warrant a prosecution, the prosecution is recommended, but I think the hearings should be in private, as the law requires them, for two main reasons: one is that the chemist is liable to make a mistake. He can make a mistake in two ways, by the transcribing the records from one card to another, or the analysis, or may make a mistake in the analysis. We therefore find it very agreeable to have hearing in private. We find out from others when a man is accused, and if he has no excuse to offer, and he doesn't usually have, and goes up and pays his fine. If a man has a guarantee, and it is looked after, a man receives publicity, and that was emphasized to us in one or two cases where there was carelessness in serving the complaint. He was given publicity, but afterwards exonerated. It is what the man does not do that counts against him. We have found it to be very satisfactory in our state.

Mr. Allen of Kentucky: I just want to add my little experience. We get about two-thirds of our results through hearings. We probably would not get them if the arm of the law was not back of us, and I recognize their reasons for having hearings. One of our laws eliminates the element of intent, as part of the offense, and yet, notwithstanding it does that, I feel there ought to be some amelioration—something to enable the prosecutor to base his prosecution on, actual incidents where he sees fit. Another reason, fully seven-eighths of the work, after it gets past organization, is constructive—seven-tenths is not due to intent, but in straightening that out, the administrative provision which permits you to have a hearing, enables you to bring constructive hearings to straighten out the sanitary conditions and the very reason is what Dr. Jaffa has emphasized, and that is to enable you to make up your own mind fully that all the facts are unques-

tionable. We think the best testimony we get out of a hearing, the manufacturer or produce dealer very frequently brings testimony that shows his intent, and guides it to his prosecution. The only problem we have here is as to the "hearing clause." No good results can be gotten out of it. The only question in my mind is how far the executive can go after he finds the law has been violated. My system is, when the case is finished, whether it is finished on correspondence, or hearing, is to dictate at once, the facts, and put it away in a file. I feel then, that I have done my duty, and if the legislature wants to investigate it, they can; and this case can be held for further inspection or investigation, and looking up further facts, or this case is held up because the manufacturer in New York was responsible, and he bought it under Federal guarantee, and it was bought in good faith. If a Kentucky dealer has that Federal guarantee in good faith, I do not believe our legislature or public is going to call upon us to account for trying to put justice into our work, and if that is all done above board, I do not fear the results, and since the hearing clause has come into the Kentucky laws, we have had very good results. It has loaded us with responsibility, and all that sort of thing, it is not only constructive and not only eliminates the hard element, but it enables you to get to the root and heart of the matter, to get it out and with very little expense to the state to straighten it out.

Mr. Brown of Tennessee: I do not think it is worth my while to add anything to the discussion, but the experience of Tennessee might be of interest to the gentleman from Oregon. We did not need hearing clauses in our laws, but the last session of the legislature added it and we hold our hearings just the same. We did that because we felt it was absolute justice to the ignorant man, having no knowledge of the law and possibly could not read the labels, outside of the negro element. We felt it was an injustice to give them an unmerited program, and not give them a chance to do right, and we have found they will make an effort to do the right thing. It does not leave any suspicion or motive behind, and gives him the aid of the judgment of other men. It is the same as the Federal act, and so far as I know it works satisfactorily. I cannot agree with Mr. Bailey that every man is a violator in every sense, and ought to be prosecuted. I haven't found them so willing in the first place to commit dishonesty, and on trying them I haven't found them so willing to come into opposition of the law as such, and the suggestion would seem to indicate it, and I cannot help but see an enormous amount of injustice would be worked if every commissioner would prosecute every case of violation he had, no matter what the source of the violation was.

The Chairman: We have now taken up one hour and fifteen minutes time, or fifteen minutes more than the time allotted to such subjects. I would like to ask the secretary to take the chair. I want to say just a word.

It seems to me, if the law has been violated, and the proceeding is criminal, I cannot for the life of me, see what right a commissioner should have to assume the duties of a court and jury. I do not think he ought to encourage mislabeling and adulteration. Publicity has done more to bring out more evidence than the laws have, and if we are going on and holding secret hearings and invest the executives with right of punishment of offenders and take care of his conferences and administer the law and things of that character, you are bound to open up all kinds of criticisms by the trade and by the public. We have certain sections in this country where they persist in selling and shipping out into our state doped food, and it isn't necessary to mention what sections they are. Now, are we going to permit this? Many of them are innocent and many are not innocent. Our Supreme Court says they are bound to know. They are in the business, and if they buy from these spurious houses and buy goods or stuff and sell it, the Supreme Court of Pennsylvania says they sell it at their peril, and if we are going to protect the health of our people, there is just one duty for you and me as executive officers, that is, when we are convinced from the reports of our chemist and agents, it is to go on and let the case take its regular course under the law. Supposing some one should commit an assault and battery or burglary, or any other crime, are we going to give them a hearing? The sale of doped food it just as bad. Why some of our newspapers in Pennsylvania compare it even to murder, and if we are going to correct this great fault, and it is a fault, I do not believe in winking at anything, and I do not believe in holding any star chamber hearings. We ought to be sure that our chemists are careful and accurate, that our agents have the facts, and we have a law before us, and in Pennsylvania we have no executive hearings, and I do not believe such a law could be gotten through the legislature of the state, and if it was, we would have the newspapers on us all over the

state before we disposed of half a dozen cases. We ought to be careful, and if we believe after being careful, the law has been violated, and our chemists are careful, for we have none but what have had years of experience, we have nothing to do but institute the case and let it take its course. Now, we will touch the retail dealers; they get their doped vinegar and ship it in, and jam, and so forth, and there is nothing going to break it like the strong arm of the criminal law, but taking them into court, and if anything wrong has been done, give it all the publicity you can and break it up. (Applause.)

Mr. Jones of Illinois: Why should not the food vender have the same right when he is as bad as the other fellow?

The Chairman: Everyone who sells adulterated or misbranded food in Pennsylvania gets a hearing before the magistrate.

Mr. Jones: So if the commissioner wants to punish or reward he can, but commencing prosecutions indiscriminately, easier than by having the hearings, where it has taken but a moment, whether he is doing it for revenge or something of that kind. There is no sense in that provision, and I will tell you why. Everything you said shows there has never been a criminal statute made since the time of the writing of the Domsday Book.

The Chairman (interrupting): Now, I will answer the Commissioner, if there is no objection. I want to say further, every defendant is given a hearing before a magistrate in Pennsylvania, and if we would go and pile up prosecutions against some man we wanted to punish, it would soon develop, and I don't care who the person is in control, and the reason would appear for every prosecution that is brought for the violation of the food law. He can waive a hearing, or he can demand a hearing, or he can go to court, either way.

Mr. Jones of Illinois: Do you know you can become the most popular food commissioner in the Union, not only with the people, but with the people of the pure food association of the states that has the clause called "the guarantee clause"? every man that is tried that your chemist finds or inspector finds there is a mislabeling, you ought to give a chance. You won't have half the trouble. You may not get as many fines.

Mr. Bailey of Oregon: Mr. Jones has made some reference to the mistakes of chemists, now I want to know how many mistakes his chemist makes.

Mr. Emery of Wisconsin: The complaining witness goes to the magistrate or justice of the peace to get his warrant or complaint, and after the examination the court must decide for himself, and if it is a case of merit, therefore the matter rests with the court, and no need to take up any extra time. I want to say I am in the most hearty accord with Mr. Foust's position, and it is not within his power to bring these prosecutions, and I do not believe that the commissioner should be compelled to sit down and have hearings against his good judgment in the case of food law violators.

Mr. Allen of Kentucky: Supposing, Mr. Commissioner, that the inspector should inspect a creamery that was not technically in violation of the law, and supposing after the inspectors reported to you the owner of that creamery should come into your office and say, "Mr. Emery, I understand that there has been some violation in that creamery. If you will designate what we should have done in the way of sewage, and in the way of water closets, we will do it, if you will tell us," would you prosecute that man?

Mr. Emery of Wisconsin: If in my opinion that man should be prosecuted I would prosecute him. The men sent into the field should know their business, but they should not be out with a chip on their shoulder, and there is more or less there the question of sanitation, but when he has made up his mind that man should be prosecuted, he will be prosecuted.

Mr. Flanders of New York: I want to raise one question. In our state a concern that is absolutely honest and upright was brought in by one of our inspectors, charged with having sold adulterated milk to a soldier. The man came to us immediately and showed that the milk never had been in their possession, was bought of a farmer who had sent out thousands of gallons, but they thanked us and paid the penalty. I do not think it is fair to call that man an adulterator. He says, "I recognize the fact. I am here with my penalty, but I don't want to go to court." Should we not give him a chance? I am talking about civil practice. We do not assume to settle criminal cases. We have a grand jury that hears the questions of prosecution, whether they shall be sent to court.

The Chairman: I think we will have to abandon any further discussion. It is now fifteen minutes of four o'clock and we have two more papers for this afternoon. The next paper is by Mr. Barnard of Indiana.

IN STATES HAVING NO CENTRAL LABORATORY, IS IT MORE ADVANTAGEOUS TO EMPLOY THE ANALYSTS UPON A FIXED SALARY, OR AT A STATED PRICE PER SAMPLE ANALYZED?

By H. E. Barnard of Indiana.

Before consenting to prepare a paper on this subject, I advised your chairman that my deposition would necessarily be one-sided because of the fact that the department with which I have been connected, both in New Hampshire and Indiana, have maintained a central laboratory, and I have, therefore, had no experience in the employment of outside analysts, either upon a fixed salary or at a stated price per sample analyzed. What I have to say will therefore, undoubtedly, portray the advantages of a central laboratory rather than the disadvantages which may arise under another method of operation.

In at least half the states, the laboratories are operated in part as research laboratories. This is the case in all laboratories connected with State Experiment Stations, and is or ought to be, equally true of laboratories doing public health work. In state experiment station laboratories it is impossible definitely to determine the cost of single analyses because of the fact that much time is given to the investigation of problems, the value of which cannot be determined in dollars and cents. In our laboratory, for instance, our chemists have made a critical study of the bacterial contamination of food, of the deterioration of standard pharmaceuticals; and of the most suitable methods of the use of benzoic and formic acids as preservatives to be employed in the manufacture of sugar syrups, and for an entire summer we operated a soda fountain for the purpose of studying the keeping qualities of crushed fruits. All such work is directly connected with the enforcement of food and drug laws, and yet the analyses required were not of the type usually carried into court in the prosecution of cases for violation of law. Where a department is operated solely for the purpose of enforcing statutory requirements and where no attempt is made to assist manufacturers, or co-operate with dealers, the hired analyst may be able to furnish the routine work essential to determining whether or not the butter fat content of milk is satisfactory, whether a given sample is oleomargarine or butter, whether a vinegar meets the legal standard, or is deficient in some factor, whether a preservative has been used and how much, and all of the hundreds of tests which are necessary to determine the composition of the various articles which are collected by the inspectors and sent to headquarters.

When our laboratories were first opened and before our pure food law was enacted, it seemed advisable for us to know somewhat definitely the exact condition of the food and drug market of the state. For that purpose we collected a large number of samples of great variety in every part of the state. These samples were sent into the laboratory and analyzed by our chemists who for more than a year gave their entire time to this work, which was of the most routine character. The expense of maintaining a laboratory during this time, including salaries of chemists, clerk and janitor, bills for chemicals and apparatus to replace breakage was \$0.8824 per sample. The total number of food and drug samples analyzed during this time was 5,200. The work of the clerk was in considerable part devoted to sending out information in answer to inquiries that had nothing to do with the analytical investigations. Included in the list of articles analyzed was such things as wines, whisky, vinegars, maple syrup, preserves, flavoring extracts and syrups which cannot be analyzed except at the expense of considerable labor. Less than 10 per cent of the samples were milks. The work was well done, and the results obtained were most valuable to us, while the expense, I am confident, less than one-fifth what it would have been had the work been turned over to commercial chemists and far less than it would have been if it had been done by contract. In the six years since these figures were compiled we have never again approached them. At the present time it is probably costing the state more for its analytical work than if the samples sent in were turned over to some commercial laboratory, but it must be remembered that we hold the routine work of our chemists, that is, the analyses of samples sent in by inspectors, to be by far the least valuable work of our laboratories. I should not wish to say to a young man who was thinking of joining our force that we could offer him only an opportunity to grind out analyses of various food samples, and that we should utilize his results only for the purpose of convicting an offender who had violated the

law by diluting his vinegar or misbranding his jam. What we want of our chemists is the ability to do real, constructive research work. We wish them to determine whether or not a given patent preparation will perform the wonderful cures enumerated upon the label. We wish them to be competent to carry forward such physiological experiments as may be necessary to determine the effect of a food preservative. We wish them to develop new analytical methods which will assist the analyst in detecting fraud. We wish them to take their place in the scientific societies and to turn out work for scientific publications which will be a credit to themselves as well as to the department.

But I am wandering very far from the subject assigned me and have argued for a central laboratory rather than the point at issue.

If a department has no central laboratory and wishes only to determine the composition of food stuffs insofar as it may agree with fixed standards, I believe the most suitable method is to contract out the work required at a fixed price per sample. This price should vary according to the amount of work required. A milk analysis, for instance, should not be at the same price as a vinegar analysis. As a chemist, I should deplore any attempt to reduce the price of such contract work to a point that it would naturally go to men who have no right to be called chemists. Unfortunately almost every town shelters some partially trained men, possibly some laboratory assistant who calls himself a chemist and who is willing to undertake chemical work at a ridiculous figure. In other words, there are as many grades of chemists as there are of physicians and attorneys. The state employs the best attorneys at command and pays them an adequate fee for their services. I do not favor the employment of an analyst at a fixed salary where only routine work is to be done, unless it is apparent that sufficient number of samples will be collected to offer him constant employment and if such is the case a central laboratory should immediately be organized. In my case, for instance, I find the number of samples sent in by inspectors constantly diminishing, and yet we are constantly enlarging our chemical force. We have, however, as I have indicated above, many opportunities for chemical services and all of our men are always occupied.

In summarizing my remarks I shall put them in this form. If a state has no central laboratory in close touch with the head of the department, it ought to have one. If the present laws do not authorize such an establishment, amend the laws. If they make no provision for other than routine work extend the province of the department, by legislation, if necessary, until the laboratory is something more than a wheel of the machine which carries the defendant and his illegal samples through the courts. Food commissioners must be more than clerks, executives in office chairs. They are vested with functions that call for trained, skilful service, and if their work is to be constructive instead of mere routine, salary drawing, political rewards, they must be surrounded by something besides filing cases for briefs, score-cards and report blanks.

The Chairman: Now, who will be the first to open the discussion on this paper?

Mr. Flanders of New York: I assume that the question asked here is to determine the question under the laws of our state as they are, not perhaps as some of us might think they ought to be.

Mr. Barnard of Indiana: That is why I started off my paper as I did, Mr. Flanders.

Mr. Flanders of New York: Now, in the state of New York, we have a central laboratory. The work there is performed as much as possible by the chemists, but we have them working from Pittsburg to New York City, five or six hundred miles away. Our work is largely to protect the public against fraud. If we find a violation, we have to have our witnesses in court. We pay some of our chemists salaries, but we find it is not conducive to make them do any work, but it does by the piece. We have them scattered over the state, and we do not have difficulty when we come to the trial of cases. We have one chemist in three or four departments, where there is too much work in one laboratory.

Now, as to the ability of the chemists, as to what the results will be. We have no jurisdiction under our statute, and as I understand the question, that is not a chemical question, but I understand it to be a pathological or physiological question. The chemist's work, as I understand, enters into the question of what parts there are and then it is a question of whether the substance, the selling of it, is a violation of the law. So under our statute, we have no central

laboratory, except to determine whether substances are harmful to accept.

Mr. Caspari of Maryland: I listened with a great deal of interest to the paper read by Dr. Barnard, and in a small measure we follow that principle. We have a state laboratory in which we employ two chief chemists and two assistants, and in our private use we receive information whenever samples are not up to the examination, this force has the work of investigation on points that are of great importance to us. Some time ago we were very anxious to get good concrete ideas regarding vanilla extract, and we purchased all the varieties of vanilla beans we could, and made extract of them, and then determined the contents of those beans to enable us to get the contents of food stuffs. This information is useful in deciding commercial cases when they come up from time to time. The same thing of vinegar and of meat, sulphuric adherent in the meat. The research is being successfully carried out. We are fortunate in having a man that was connected with the Johns Hopkins University for a number of years, and we get the benefit of his ability. The fact is with a central laboratory, we can do a large amount of research, being valuable to the commissioner, and it seems to me is a very important point. In Maryland it is out of the question to go to the chemists from day to day and have analyses made. The city of Baltimore contains about half the population of the state, and I would suggest it to those who have not tried a central laboratory.

The Chairman: I would like to say here, the subject was put on here, did you ever, Commissioner Jones, keep track of how much it cost you per article for doing your analytical work?

Mr. Jones of Chicago: We did not keep a central. We found in the smaller towns they had no laboratory, and in the larger towns, like Peoria, for instance, there are certain druggists who do analytical work. About three-fourths of the whiskey in the United States, I understand, is manufactured in Peoria, and they have their chemist to handle that; for champagne, they have their bacteriologist. The trouble about getting a commercial chemist, and that is what you have to do, unless you have chemists scattered around over the state to do it, under our law, it requires a duplicate sample. If he would take a sample within a month he would take a duplicate sample, and under this method, which he would have a right to do, it would likely put the chemist in a bad position and we could not get satisfactory results out of it. It is a little more expensive, but not much, and we have chemists there that do not do anything else—a state chemist whose duty it is to check up and take care of that work, and then in all these cases that has to be done in order to prosecute. We could not get along without a central laboratory, and we could not afford to take the chances on a commercial chemist, for the reason we think we would have a large amount of trouble. We have over 4,000 manufacturing plants, one has over a thousand men selling goods over Chicago. They had three chemists, the chemists doing work for them, so we would give them \$5 an analysis. If they could get \$25, I think the \$25 would be over-sized. I would hate to put a chemist up against a proposition of that kind. Knowing human nature as I know it in Illinois, I do not know whether it is that way in Pennsylvania or elsewhere, but we have all analyses made at the central laboratory. It is a little more expensive, but we have never had any trouble about getting our suits tried. With the grind we have continuously, we get around in due time, and I do not think the department could get along without a central laboratory, whose duty it is to analyze the articles taken in.

Mr. Barney of Iowa: I agree with Dr. Jones of Illinois, and I do not see how a department of any size could get along without a central laboratory, and have their own chemists. I do not think it fair to put a chemist up against the proposition Dr. Jones tells about. Take it in Iowa, I do not know what we would do without a central laboratory. We have two very good schools, a school at Ames and a university at Des Moines, but I haven't found it very satisfactory. I do not pretend to give any particular instructions, but ask a question I am getting something out of. I will say we are having a lot of trouble with doped linseed oil shipped in from neighboring states, and the oil is made of sixty per cent linseed and about forty per cent mineral matter. We have had our chemist do all the work that comes from merchants having bought this doped stuff, and send it in there to find out whether it is pure or not. We would have to have an army of them, and I would like to ask what the others do under conditions of that kind, and how you get rid of that kind of work from retail dealers, and I would like to hear how you take care of matters of that kind.

Mr. Bailey of Oregon: We do not wait, we go and prosecute the adulterator and stop it.

Mr. Brown of Tennessee: There are plenty of commercial chemists in the country that will make analyses of stuff. It is not our business to do that.

The Chairman: I want to ask the secretary to take the chair just a moment, and I want to state here, while this subject is here today, I am getting the light I want. Our last legislature stated we were spending too much money in doing the work, and we had lots of room up in the building, and we ought to establish a place of our own and hire the chemist and save about \$15,000 a year. I will state how we do it there and that is why Mr. Jones might give me figures in the equipment supplies, and everything in connection with the analytical work in the state of Illinois, what it costs them per sample. We have six chemists, and we do not allow them to do any work from the trade, or they would make about \$3,000. They are allowed \$1 for milk and \$3 for foods where an analysis on benzoate was made, and on quantitative analyses they got \$5; vinegar is \$5 if non-alcoholic, except where non-quantitative analysis is necessary: milk is \$3 and ice cream \$2, and we spent about \$20,000 a year for having this work done. Now, there is a great advantage in having it this way. Our chemists have had from five to thirty years' experience in food products, and I do not know of one man that hasn't had from ten to thirty years, and they are able to take care of themselves on the witness stand. On the witness stand on cross examination, the attorney will say, "You hold a position with the state by appointment?" and they will say, "No, sir; I am simply employed to do a certain work and analyze these samples at so much per sample; it is immaterial whether they are good or bad, in fact, I am losing by being up here as a witness." I think we only allow them \$10 a day in court as a witness. I think it is fair compensation. The question I want to raise is whether we are paying too much for our analytical work done.

Mr. Brown of Tennessee: You are getting it done cheaper.

Mr. Jones of Illinois: In Illinois we have always figured it from the public health standpoint; never thought of what it cost for sample. The question is not what it costs, but if the legislature would ask me anything about it, I would ask them what a life is worth. In some cases they will spend \$75,000 to \$100,000 to convict a person. You may have a case that will have fifteen or twenty chemists, and the corporation puts up a fight. You can't try that case like a milk or vinegar case, it involves more. You have different chemists to meet, and your chemist and department goes down in disgrace if you lose. Now, they have given us the best laboratory in the Union, the Government has no better. We did not waste any money, but we spent all that was necessary to get it done, and that is the way we do in taking our samples. When a case goes down in the country, it isn't a question of a 25-cent meal, because he is an employee. He should be paid well. One sample will cost \$5, and another sample \$25 or \$50 to make a proof. I do not think you could give the legislature any information to fix a salary. It costs about so much to run a laboratory, and we have given them the figures, and they have given it to us.

In the case of figuring on that cost, when you go to a lawyer or doctor you do not know how long the fellow will be sick. He may be sick a week, year or all his life. A lawyer cannot tell whether a case stops at the lower court or of the higher court of the state, or of the United States. You have to bring other chemists to corroborate what is done, but you can see when you are hiring a chemist in a country town, he is not qualified like a central laboratory chemist where you spend thousands of dollars for appliances to do that work. If you are going to have your department put on the same plane or level with the other departments of the country, you have to bring it up to that plane. The country chemist hasn't the appliances the modern chemists have, and he may fall down where he is not prepared to do the work. If you have a man that is prepared and a man stands over and watches and guards it, you will get into very little trouble with a central laboratory in my judgment.

Mr. Winkjer of Minnesota: I think it is necessary to have a central laboratory, although you pay twice as much as you do the other way. I will cite a case last year, where we had an oleomargarine violator. The inspectors gathered up facts throughout the country, samples that were sold on the market and sent in to the chemists. The chemist and another man, one of the inspectors, went to work and manufactured the oleomargarine right there in the laboratory, and it was of immense value to us in the trial of the case; things we could not have had, had we not had our own laboratory. I want to emphasize what has already been suggested, or rather found fault with. I think careful judgment should be exercised in getting good men for doing the work. We get them from the University close by in watching those that

are doing good work among the students; that have done good work in the classes, having assisted their professor and are competent to work under our head chemist, so in carefully selecting these men, we are able to grind out work that is very satisfactory.

Mr. Allen of Kentucky: I could not conceive of doing the volume of work we have in Kentucky without a central laboratory. You can, Mr. Flanders, compensate the efforts of a chemist, through giving him a chance to publish articles, and through raising his salary when he merits it, and through all those numerous ways that come to his advantage, and when he knows there is permanent employment, or a life job, or by paying him a percentage. In the months of April and May, in Kentucky, a bacteriologist wanted work. He only went into the work this last year and examined 3,000 samples of milk. He ran the test for the bacteria. The cost of analyzing the milk and getting the sediment was about \$1.50. Then there is the question of getting an inspector, following the sanitary methods and taking it up with your men and you feel it is the kind of work you would like to be close to. Mr. Foust, you may have some very good chemists in your department, but I speak from twelve or thirteen years constant work. A man will have his organization in better shape where he has it altogether; not only in the analyses, but he can go into anything connected with it.

Mr. Cook of South Dakota: South Dakota is a very small state when it comes to the standpoint of population, as we have only a little more than a half million population, but we have the same problems to deal with as the larger states; the same difficulty that all of you scientists have to deal with who have a larger population. Personally, I feel I must keep in close touch with my laboratory. While I am a chemist by profession, have been for more than twenty years, I am not able to turn a hand to analyzing a sample, but it is so important that things be done just right, that no mistake shall be made, I feel I must keep in close touch with the laboratory. I wouldn't have it any other way except with the laboratory just adjacent to the office, that I may step in and consult with the chemist any time. Of course, one who is a chemist would perhaps feel differently about it from one who is not doing the work. In regard to the expense, one year where we analyzed a thousand samples it cost us \$1.50 a sample, and I think our analyses was about the same analyses that are made generally throughout the country, but during the past year, just closing July 1, it amounted to about \$2 a sample, and the reason is this, that we analyzed a large number of linseed oil samples, and one analysis requires about two days' time, and we analyzed some paint, and each analysis required about two weeks' time of each man, and you know that a large number of these analyses cannot be done in a few minutes. We used to have lots of samples sent in from throughout the state. We sent out notices and said we would be glad to make tests. As you know, it takes not more than fifteen minutes to make a test of linseed, and our men have gone out into the field and made tests.

I want to say in conclusion, I do not see how we could do the work nearly so well in having the analytical work done a long distance from the office.

Mr. Winkjer of Minnesota: The commercial houses in St. Paul and Minnesota are hiring their own chemists, which seems to be a good argument for having a central laboratory, and the flour people and the merchants are hiring them and there must be some reason for their so doing.

Mr. Flanders of New York: Supposing we have no central laboratories, I understood it was to be discussed. I do not wish to be misunderstood, we have a central laboratory, and we want one, but supposing we are discussing it in a broad sense, I would like to discuss about the matter of perishable products. We have a lot of cases where we send them to the central laboratory. Why do you employ all these people? Isn't it necessary to have other chemists to do that work? They should have a central laboratory to consult and advise with. Which is the most advantageous way to employ them? We employ them, as you do, by the piece, and I want to say you are paying your chemists rather poorly, paying them at \$10 a day. We pay ours \$2.50 an hour, and they send word back they do not want any more and want \$5.00 a sample. We have chemists working for us that tell us they could make more than by standing around at \$2.50 an hour in court, and losing cases that would give them \$50 to \$100.

Mr. Cutler of Missouri: The element of expense hasn't been considered in this discussion, the expense of the central laboratory, if given a sample and the cost of the chemist going to some town in the state where the prosecution is to be made. I haven't heard that discussed. We have heard

about the cost in the laboratory, and it seems to me that is the smallest part of the expense, the expressing of milk cases and the chemist appears at the prosecution, and the defense gets a continuance and he has got to go back to the laboratory, and two or three trips have to be made. While it seems to me that the central laboratory is very nice to have, we haven't the cost of the laboratory. I believe every state ought to have a central laboratory to do research work, not for prosecutions, but the information which the public has to receive from it, and not the matter of legal prosecutions. I believe the local laboratory is much the best.

The Chairman: I want to say in order that there may be no misunderstanding, under our system in Pennsylvania that we haven't a man who has not been doing the work since the department was created in 1895, and all the work they do for the central department, and they are located in different parts of the state, and we can run five or six courts, and we hire our own attorneys. We don't have to bother the attorneys, we have our own attorney. We have our own chemist for the work he does. We have good work done. In one trial, there were four of our own chemists and three of the Government's, and their expenses were \$40 a day and hotel expenses. The only thought is, are we paying too much? We tried a single case that cost us \$5,000 for experts, one case in Philadelphia two years ago. I want to know if we are paying too much for analyses.

The President: The next question on the program is by Dr. E. F. Ladd of North Dakota.

SHOULD FOOD EXECUTIVES PASS UPON THE LEGAL SUFFICIENCY OF LABELS FOR THE INFORMATION OF MANUFACTURER OR DEALER?

By E. F. Ladd.

Mr. President, and Gentlemen of the Association:

I am going to discuss this question particularly with reference to my methods of procedure, and I know that many of you gentlemen have differed and will continue to differ with me in my opinions on these matters. However, it is only a question of arriving at the end, and accomplishing the results.

The question as to whether we shall pass upon the correctness or sufficiency of labeling, or exaggerated statements which are made upon the label, and thus give the information to the manufacturer is one of the questions that has puzzled more than one food official. There are many points for consideration in a question of this kind. There are manufacturers who are honestly seeking advice which might properly be given by a food executive, and there are manufacturers who are seeking to gain a trade advantage over some competitor, and not placing the true inclination before the commissioner or executive, from whom he seeks information. True, there is the law or statute itself, and lawyers and courts can interpret the act for all clients, but even then it is a question whether the true interpretation for an individual case can be given by one not wholly familiar with all phases of the law and its workings, as is the commissioner himself. Personally I will present my own views with regard to this matter, and will not attempt to speak for others who may look upon the question from a different standpoint, and yet are as fully justified in their stand, as is the writer.

I have chosen to pass upon labels for the benefit of the manufacturer, believing that by so doing I am serving the greatest number of people, honestly seeking for advice, and where there are those who abuse the privilege they are soon exposed by this department before the public for the course which they have taken. Having passed upon a label, and found the same in compliance with our law for a product which is appropriate under this particular label, I do not hesitate to condemn the same label when I find that a manufacturer has misused the same.

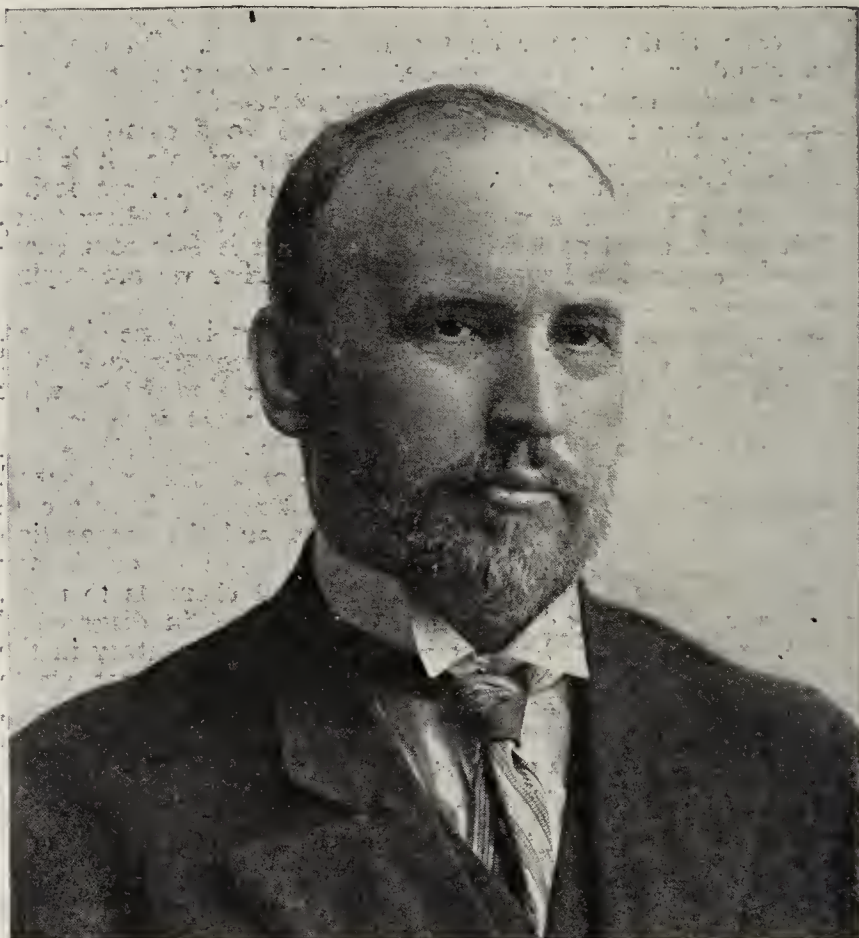
Assuming that ninety per cent of the manufacturers are intentionally honest in their endeavors to comply with the law; that five per cent are incompetent, and another five per cent are downright crooks; that a much less number than ninety per cent are by circumstances forced to adopt questionable methods; I believe that by aiding the manufacturer we may bring the list of those who will comply with the law to its maximum and weed out those who are downright crooks.

At times labels show omissions, that should be supplied in order to comply with the requirements of the law of North Dakota, and here I make it clear that my suggestion for changes in the label is with particular reference to compliance with the laws of North Dakota; for other states the matter

must be taken up through the proper channels to secure the information.

At times, the weight or measure may not be shown; the name and address of the manufacturer may not be correctly given; the size of the type may be such as to obscure the most important and essential features, while over-prominence is given to some feature which causes deception. The manufacturer is not always to blame for this. The lithographer or artist who prepared the sketch for the label desired to produce a beautiful effect in order to secure advertising advantages, so he produced a label beautiful in appearance, and the manufacturer has given little time or thought to how this matter may be construed by the commissioner; while still others have given it little thought, so long as it was to their trade advantage.

We have found cans labeled, "Maine Sweet Corn," when, as a matter of fact, the corn was grown in the west, but from seed brought from Maine. This is an intentional deceptive and misleading statement. At times, the quality or grade of the product in canned goods is not correctly given. For instance, in canned peas or canned tomatoes, it is stated,



E. F. LADD,
Food Commissioner of North Dakota.

"First Quality," or "For Fancy Trade," or "For Best Family Use," when, as a matter of fact, the quality cannot be classed as above average standard. Such a statement is as deceptive and misleading as the labeling of a product as "Mace," when in reality the product used is Bombay mace, which has little or no value as a condiment. This use of Bombay mace for Penang is not one whit better than the use of cocoanut or olive stones in pepper. But the truth has been told, as far as it goes, in that the product is mace, but not a mace suitable for condimental use, nor what the purchaser expects to get; and it is equally misleading when it is a blend of the true mace, Penang, with Bombay, unless the words "Penang" and "Bombay," are made prominent features on the label. I even then question whether, when so labeled, deception is not practiced. Again, we find on a label perhaps a picture representing a pod of green peas broken open; the brand may be given and the word "peas" printed in prominent type beneath the picture, leading the purchaser to suspect or to suppose that he is getting a high-grade article; but somewhere else on the label we find, hardly noticeable to the average reader, the words "Packed from soaked peas."

At times there have been labels which read, "Strawberry Preserves," put up in attractive form, while on the back of the container would be a similar label stating, "These goods are adulterated and misbranded." What can be more ridiculous and absurd, and yet such are the conditions we must deal with.

Again, in the case of extracts, we see a product labeled "Vanilla Compound," or "Vanilla Flavor," followed by the statement that this extract is composed of vanillin and tonka, or coumarin, colored with caramel. Such labeling is wrong and often, by pointing out the fact to the manufacturer, he is willing to make the change in order to have the product comply with the law of the state.

Sometimes a manufacturer states on his label and in his advertising literature, that "this can contains only those ingredients that are sanctioned under the national law," or "Only those ingredients which are sanctioned by Government officials," when, as a matter of fact, the product is preserved with benzoic acid, which may be stated upon the label, but usually the statement is not given prominence, and the amount of benzoic acid is above what is claimed. I have often found that the type used on the labels of all classes of food products, baking powders, canned goods, package goods, etc., was of such nature as to attract attention to those features which the public were looking for, while the less known and objectionable features were printed in type not intended to attract attention. At times, extracts will be labeled on the face as "Vanillin and Coumarin Flavor," while the end of the carton will have the one word in large black type, on a white background, "Vanilla." The bottles are laid flat with this end where the public will see the same. Such a label is held to be misbranding under the North Dakota law. Or, the weight may not be shown in good type upon the face label, but tucked away somewhere in the reading matter or advertising where it does not attract attention. Again, I have seen the net weight on cartons and canned goods in type so fine that a magnifying glass was necessary to read the same.

Custom and dishonesty among a few has made it necessary for all classes of manufacturers to, in a measure, adopt a like method of labeling, and this has been encouraged by those who make labels for the general manufacturer. I find that, very often, when the manufacturer's attention is called to the real question of misbranding, he is only too glad to make the necessary change.

What I have said thus far has had to do largely with the question of foods, drugs and the beverages. When it comes to the question of patent medicines, proprietary products, and those of like nature, we are dealing with a different character of products, where deception and fraud often seem to be the basic principle upon which the business is built. In fact, the literature which accompanies the container, as well as the advertising in the circulars and papers, are false and misleading, intended to create an interest or desire on the part of the reader to try the virtues of the remedy. It may be a consumption cure, setting forth the great evils of consumption, the symptoms (which are often far from correct), and the great advantages to be derived from the use of this particular medicine, and which may be wholly a fake, perhaps, it is a fat producer, or a developer for the entire body, or some particular part of the body, according to the fancy of the person who is looking for the same, as, for example, "Bust developers," couched in language that is intended to be somewhat mysterious and secret, savoring of quackery, but truthful enough to deceive and mislead the unwary. Here it is necessary not only to condemn in the strongest terms the character of the literature, but at the same time to educate the public to a better understanding and value of this product, and its place in medicine; how the majority of such products are fakes pure and simple; and that in cases of illness, sickness, deformity, etc., it is safer to deal with an honest physician in whom one has confidence.

The writer believes that for this class of products there should be established in every state a board whose duty it should be to pass upon all medicinal preparations, patent medicines, proprietary products, etc., before they can be permitted to be placed upon the market; the fakes to be weeded out; and all false and misleading statements withdrawn. When that day comes, quackery will become largely a thing of the past.

Years of experience have, therefore, taught me to believe that the food commissioner may safely and properly aid the manufacturer in passing upon the labels and literature which is used, but always with a clear statement that the label, as passed upon, is for a specific product as represented in the label, and when a departure is made from this in putting out a product, the labeling is no longer justifiable. This department will not hesitate to denounce in the strongest terms and reverse, if necessary, the decision which has been previously made with regard to any particular label when it is found that there is deception in connection with the use of the same. The statement should also be clearly made that the label as passed upon is for the state under considera-

tion, and that its use may not be permissible in all states (Applause.)

Mr. A. H. Jones: Mr. President, I have listened with a great deal of interest and attention to Dr. Ladd's very able paper, and I think his course, and the policy pursued in his state is the same, substantially as we have tried to pursue in Illinois.

As I have stated, we have in our state, thousands of manufacturers of foods; we have our packers and our condensers, and all those interests, and they, in the main, all try to comply with the law. They bring their labels in by the dozen, and I expect during the year by the hundreds. We don't mean by that to say that we stand back of the labeling, or O. K. it, except if the article it represents is as represented by the label, then it will pass; but it must not be a deceptive label. It must not represent that it is composed of constituents that are legal under the law, and that, upon chemical analysis, or upon analysis by our chemists, is found to be different. We do that as a matter of education. At the first meeting I ever attended of this association, when it was under the name of the National Association of Food Departments, one of the chief objects was to educate the people in regard to the use of foods. The first thing is to teach the consuming public to read the labels. Then, in order to be in a position to advise the manufacturer or packer that prepares or places the label on the article or goods, you must know how to print it, so that they can tell the lithographers just what they want, as Dr. Ladd has said. Then, even when that is done, here comes an ignorant fellow, who does not understand the meaning of what appears on the label; that is, he is ignorant so far as his knowledge of the language is concerned. He may be bright enough in other ways; I have had fellows who knew more about the ingredients of food than any food commissioner I ever met, but they couldn't take one of the labels, and tell you from that what the label showed. Our law requires that every label shall be printed in language that is clear and legible, so that it can be read readily, and that it shall be printed on the front part of the label. It is a part of the duties of the commissioner to see that the law is enforced; it is a little onerous and it requires time; there is nothing lost to him, but there is to the consuming public. The commissioner should state to the manufacturer: "Your label is not right," and show them wherein the label is wrong. Correct it for them. I don't mean when I say that you should select the label for them that you are going to stand for the article if it is not within the law, but that is merely so the manufacturer may understand that if the article is as he represents it, he can have the assistance of the commissioner in preparing a label that is proper. If the ingredients that enter into it are as the manufacturer represents it to the commissioner when he comes into my office as commissioner, if it is that way, he can put that label on it safely, but if he represents it to be composed of certain ingredients, and upon analysis it is found to be composed of something else, it would not be worth the paper it is written on, so far as that is concerned. We wouldn't pay any attention to it. In other words, our law in Illinois provides that it must be true to the label, or the label must represent truly what it is. If a fellow comes in to my office and tries to put something over on me, if he tries to deceive me, or something of that kind, I say, "My friends, you have come to the wrong place." I say, "You better go to your lawyer and consult him, because if I find that this article is not as represented by the label, you will be prosecuted for it." You generally know your man when he comes in. A fellow who has been state food commissioner a few years will soon learn from experience with the kind of goods he sees, and his knowledge of the individual himself, and all that, whether a fellow is playing on the square, or whether he is trying to deceive him. I think Dr. Ladd's manner of doing this is as every food commissioner should do. That is my experience. When they come to see us, and we talk with them, they go away feeling that we are trying to help them, instead of hindering them; that we will try to give them an intelligent idea of what the law is, and what we are trying to do; that we are working in harmony with the state food law. It is along the line of harmony. I believe that is what we call it. That is, working so that you may be as pleasant as possible. That is what we are trying to do down in Illinois.

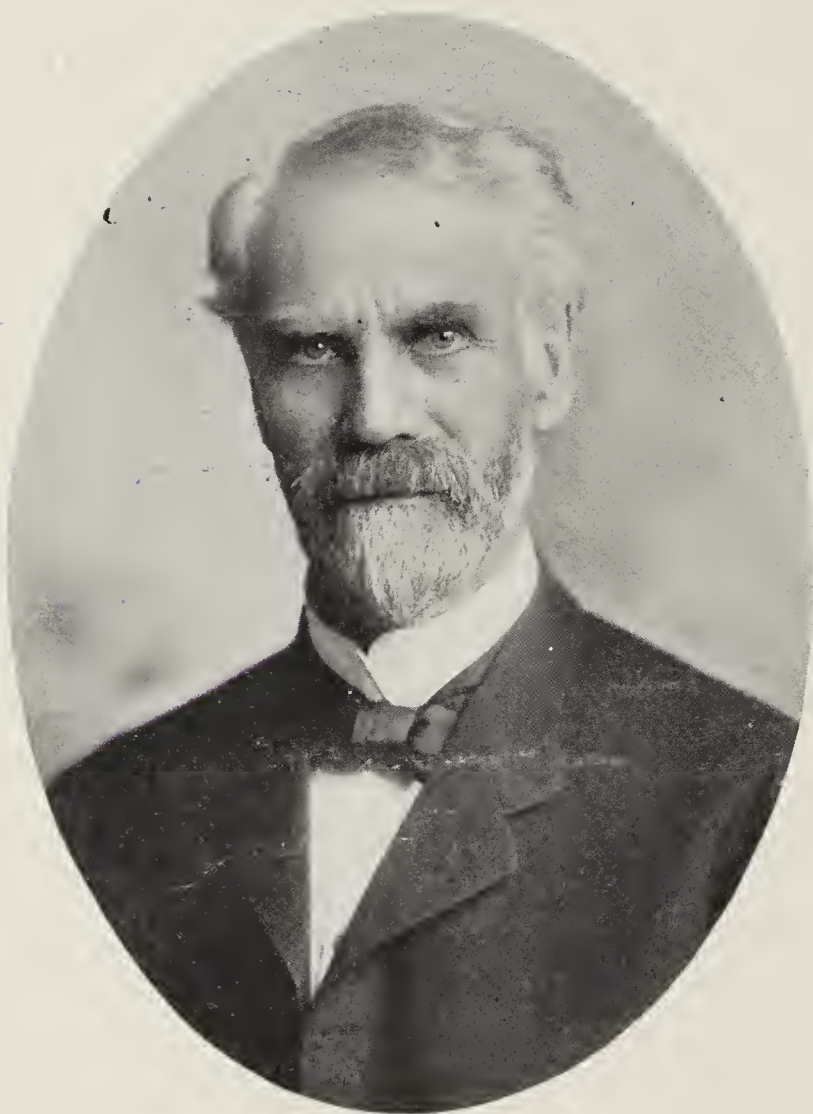
Mr. George L. Flanders of New York: Mr. President, I would like to ask a question along this line: Suppose a substance is put on the market composed of tonka and vanilla and the manufacturer putting it out labels it "Compound of Vanilla," vanilla being one of the ingredients. Would you consider that a violation?

Mr. E. F. Ladd of North Dakota: Yes, sir. We would consider that a violation of the law. We insist upon its being labeled "Vanilla and tonka flavored."

Mr. Flanders of New York: That would be the same all through the category?

Mr. Ladd of North Dakota: Yes, sir.

Mr. J. Q. Emery of Wisconsin: Mr. President, I think that we shall all have to recognize that there are different armors in which we can individually do our best fighting, and I learned some time ago that for Wisconsin it seemed best not to pounce uniformly upon the label. Our experience is this: At first, the law required that labels should have the approval of the Dairy and Food Commissioner. Some of our good friends who have spent a great deal of time in telling about the awful bad, and sudden, and frequent, and unreasonable, and damnable, and all that sort of rulings of the commissioner, sort of tired me, and it came about that one of our laws, or all of our laws, were brought into a Federal court under the claim that they were unconstitutional. It is remarkable how suddenly a man who has some food product on the market can discover that the law applying to the matter is unconstitutional, when he desires to get an injunction restraining the enforcement of that law. There is no inflexible law of practice in Wisconsin. There are cases, such as Mr.



J. C. EMERY,
Dairy and Food Commissioner of Wisconsin.

Flanders raised, that we answer frankly that in our view, a substance labeled so-and-so, is plainly in violation of the law, and if those products come on the Wisconsin market we deem it our duty to prosecute under the provisions of the statute applying to the matter. In other cases, where it is plainly an effort on the part of the manufacturer, or where we think it is an effort of the manufacturer to trifle with us, and to stick out to us some products to pass upon, that they know may be in violation of the law, we don't take the time to prosecute them. However, I want to say that in the past few years, we have been finding it mighty hard to get into court. We have been finding it extremely difficult indeed to get into court. There have been very few cases in which we have felt warranted in trying to get into court under the circumstances.

Mr. Flanders of New York: I would like to ask Dr. Ladd this question: Under what conditions might the following label be used upon a cooking compound, simply labeled with the words, "Compound Lard"? Under what conditions, if any, could that label be used?

Mr. Ladd of North Dakota: I think it would be a better

wording if it was worded, "Lard Compound," and under those conditions it might be used, as I understand it, or as it was interpreted for us in North Dakota, where it contained some lard, perhaps some cotton seed oil, and perhaps some tallow or other ingredient that might be used. Our law would go further and require that they state what percentage the ingredients were. They would have to state the percentage of ingredients.

Mr. Flanders of New York: What I want to get at is this, Mr. Ladd: Wherein is the distinction between that case and the vanilla case? I have raised this question for discussion here, because the question has been raised in our state. My contention is that it is no more compound lard in the one case, than it is compound vanilla in the other. It is no more compound lard than some substance containing some molasses and some other ingredients, could be called compound molasses. This question is of some importance and it has been raised in our state, and for that reason I wanted to get the views of others on the matter.

Mr. Ladd of North Dakota: The only reason I could see for taking the view I have in the matter is that if you stated in the name all the ingredients that are used in making up the mixture, it would require a good sized label to put the names on them; so we have allowed them to say "Lard Compound," in large type, and then state in finer type below that the ingredients of which it is composed. It is just the same way in our jellies and in our jams. They may call it "Glucose Jelly," or they may call it by different names, but they must state the percentage of other ingredients present. It would be almost impossible to put in the name printed on the label, all of the ingredients that enter into the manufacture of the product in some cases.

Mr. Flanders of New York: Wouldn't it be the truth, or nearly the truth, if they said, "Lard Compound, composed of cotton seed oil, stearin and lard"? Wouldn't that be the same as in the vanilla case?

Mr. Ladd of North Dakota: Yes, I think so.

Mr. R. M. Allen of Kentucky: I would like to ask Dr. Ladd and the other commissioners a question: A case arose in Kentucky with respect to a pop bottler, who was putting out a so-called ginger ale, composed largely of capsicum and ginger. The manufacturer said the product had always been called ginger ale, and ought still to be called ginger ale. I would like to hear the views of Dr. Ladd and Mr. Flanders as to such a claim. They made such a claim in Pennsylvania, and were able to convince the court of the merits of their case.

The Chairman: They convinced the jury.

Mr. Flanders of New York: At the expense of ten seconds, I would like to tell you a story: A boy was asked the question: If the tail of a calf was called a leg, how many legs would it have? And he said it would have four, because calling the tail a leg wouldn't make it a leg. So here there is no use calling a law a law if it is not a law. One of the great obstacles in the way of enforcing our statute is this: In one part of our laws, they have enactments to stop them from doing certain things, and in another part there are other provisions conflicting with other parts, so that it is hard for me to know, very often, just where to draw the line. Answering Mr. Allen's question, my opinion is that the substance to which he refers is not ginger ale, and they should not be allowed to call it ginger ale.

Mr. R. M. Allen of Kentucky: Don't you think that the long line of decisions which have established that no trade mark name can be given a product which is deceptive in itself, ought to apply on this question of distinctive names, under the food law? For example, Syrup of Figs, sold by the case, with which you are familiar, has been sold for years as California Syrup of Figs under its own distinctive name. That was for years and years. Then, another Syrup of Figs was put upon the market, and it was held that they had no right to a trade name, because it was deceptive. I can't disassociate in my mind what the courts have established as to that matter, and this distinctive name proposition. It seems to me that where the name is deceptive it comes under the food law.

Mr. Flanders of New York: As I understand it, our power begins and ends with our statute. If we have an exception in the statute, which takes away from us, in certain instances, our power, then the question of what ought to be does not enter into it with us, because they haven't given us the power.

In this connection, I want to say that in the state of Ohio there is a substance that comes into the state called oleomargarine, but they are not allowed to use names on the oleomargarine with the names of cows, or breeds of cows, or dairies. The people came to me with this question: "We

have a corporate name; it is the Capital City Dairy Company. Our statute requires us to put on the seal that we seal it up with, our name and address. Our name is the Capital City Dairy Company." Of course, they are not making dairy products, and the law says they cannot use a dairy name on this product. They said: "What shall we do?" They have a corporate name. They have taken of the word "Holstein," and all names indicative of the processes of the dairy, or dairy breeds of cattle. They say, "We are required to put the corporate name, Capital City Dairy Company, on the seal. What shall we do?" They have been incorporated for some time; I don't know just how long; but I suppose it was before the passage of this law. They have an incorporated name, and we have got that question involved, or if it was a trade-mark duly filed at Washington. There is some difficulty involved in deciding that question.

Mr. R. M. Allen of Kentucky: My point was this, on this distinctive name proposition: This exception is there in these terms: "Except when it is sold under its own distinctive name." My point is that any distinctive name that is, in itself, misleading, is a misbranding under the food law, and does not constitute an exception that would come under the law; in such cases, for example, where it incorporates in the distinctive name terms that are misleading as to quality and quantity, or as to the nature of the product, or something of that kind. There has been some executive error and some judicial error in the lower courts with respect to the distinctive name proposition. My contention is that John Smith's Quinine, or Canadian Club Whiskey, or Somebody's Catsup, if the product is not quinine, or if the product is not whiskey, or if the product is not catsup, or vanilla, is not a distinctive name. And in the ginger ale proposition that I mentioned, they want to call it a distinctive name, but they have used a distinctive name which, under common law, and under trade mark law, would be deceptive, and I don't see how it is a distinctive name.

Mr. Flanders of New York: Our law in New York makes another exception to that exception, providing that the name cannot be misleading.

Mr. Caspari of Maryland: Three points have been brought up here during the last half hour of discussion, which interest me very much, particularly in view of the fact that I have had trouble along the same line in my own state. One of the matters I refer to was a question brought up as to vanilla labels. Mr. Ladd and Mr. Flanders, I believe, discussed the matter in regard to the use of the name "Vanilla" on labels, and I would like to ask a question on the subject: Suppose a party has a substance labeled, "Extract of Vanilla and Vanillin," would the state of North Dakota recognize that as a correct label?

Mr. Ladd of North Dakota: Under one condition that would be allowed—that is, if there is a sufficient amount of vanilla present.

Mr. Caspari of Maryland: What proportion of vanilla bean would you require?

Mr. Ladd of North Dakota: That is a pretty hard matter to determine—the amount that it shall contain. We leave it to the manufacturer to decide for himself as to the proportions of ingredients he puts in his product, but when we come to make the analysis, if we find that it does not come within the law, we insist upon its being relabeled properly.

Mr. Caspari of Maryland: The United States Government does not take that view as to that product. In our state—in the city of Baltimore particularly—we have four or five manufacturers who are very aggressive merchants in that particular line of goods. They came to me, and asked what proportion of vanilla bean must be contained in the product to comply with our requirements, and I said, at least, one-fourth. The next day, they came back and brought me some correspondence from the Department of Agriculture in Washington, which let me out in the cold. I simply had to admit that if the United States Government was permitting them to do what they were doing, I would have to do the same thing. They are using only one-fifth as much bean as the vanilla extract should contain; yet we must allow them to continue.

Mr. J. Q. Emery of Wisconsin: You and your state are laboring under the great blessings of uniformity. (Laughter.)

Mr. Caspari: The other matter discussed here which has interested me very much is the question of lard compound. Lard compound, with us, must contain at least fifty per cent of lard.

The Chairman: How close can you determine the percentage of lard?

Mr. Caspari of Maryland: I presume, if we were looking for fifty per cent, we could probably strike forty-five—within five per cent. Of course, the larger the amount present, the closer the chemists could come to the real amount. That is the ruling we have had in Maryland for the last two

years. That is in keeping with the ruling of the Bureau of Animal Industry. We, in Maryland, are tied, unfortunately, to the regulations of the Department of Agriculture. The question as to the manufacture of ginger ale has been up frequently, and thus far, I have been able to induce every manufacturer but one to place on the top of the bottle "capsicum." One manufacturer, up to the present time, has practically refused to do that. I have not recommended him for prosecution, in view of the fact that I would probably be in the same situation as the Pennsylvania man was.

The Chairman: Gentlemen, I want to say that Mr. Bailey has made two or three attempts to get the floor, so he will be heard next. I want to say further that we have been one hour and twenty-five minutes on the subject.

Mr. Bailey of Oregon: Mr. Flanders has asked a question in regard to lard. Our ruling in Oregon is that a product must contain fifty per cent lard in order to have the word "lard" on it at all. If it simply stated "Lard and beef fat," the amount of lard in there might be very small.

Mr. J. Q. Emery of Wisconsin: When you get into court, do the courts tell you that your ruling is good law?

Mr. Bailey of Oregon: Yes, they do that. We had one case there where the can was marked "Pure Lard," right in bold letters on one side. On the top it was marked "Pure beef fat," and on another side it was marked "Pure cotton seed oil." I had the fellow arrested and he came to see me. He came up to have a conference with me. He came up to see what we were going to do about it. He says: "That is properly labeled. It says 'Pure Lard,' 'Pure Cotton Seed Oil' and 'Pure Beef Fat.'" He says, "That is properly labeled." I said, "We will take it down to court and let the court decide." Well, his lawyer got up and made that statement in court as to its being properly labeled and the court said: "Do you want to tell this court that you can take pure beef fat and pure cotton seed oil and pure lard and make pure lard of it?" He says, "You can't do it, and that is misbranding."

Mr. Flanders of New York: We hold in New York that that mixture cannot be sold, either as a tallow compound, or lard compound, or cotton seed oil compound. It is a compound composed of three ingredients, and you can't name it by any single constituent. A question I would like to ask of the gentleman from Maryland is this: Is not the ruling at Washington that an adulteration—that is, a compound or mixture—may be sold if it is labeled to show the fact that it is an adulteration?

Mr. Caspari of Maryland: That may be, Mr. Flanders, but in the matter of the extract of vanilla and vanillin that has been referred to here, the Government is not in a position, so far as I have been able to learn up to the present time, to designate what proportion of the vanilla bean shall be present in the compound, but they say as long as the three principal ingredients are on the label, it may be sold.

The Chairman: We have been an hour and thirty minutes on the paper now, and before we adjourn I would like to have the wishes of the meeting expressed as to whether we shall go on and take up another subject, or whether we shall adjourn until tomorrow.

Mr. Bailey of Oregon: I move that we adjourn.

The motion was duly seconded.

The Chairman: Before the motion is voted upon, I would like to ask what we are going to do about this official program for tomorrow. Why not adjourn until tomorrow at two o'clock?

Mr. Bailey of Oregon: Well, I will amend my motion to adjourn until tomorrow at two o'clock.

The motion was duly seconded.

The Chairman: You have heard the motion. Are you ready for the question?

Mr. Allen: Mr. Chairman, I would like to state that if you proceed other than as provided for in the regular program you will have to proceed without a reporter.

The Chairman: Well, we will have to go on. We have the program, and we will have to proceed whether we have a reporter or not.

Mr. Allen: The funds of the Association will not permit of the employment of more than, say, two reporters, and we could only employ two reporters.

Mr. Bailey of Oregon: Why not adjourn until the meeting of the Association tomorrow morning and decide at that time what we can do.

The Chairman: We better dispose of this now. We will get a reporter to report the proceedings of the meeting if we can get one; if we can't get a reporter, that is all we can do about it. We may have to go on without a reporter. Are you ready for the question that we adjourn until two o'clock tomorrow afternoon? All in favor say "Aye"; those opposed, "No." The motion is carried and we stand adjourned until tomorrow at two o'clock.

WEDNESDAY, JULY 10.

2:00 p. m.

The Chairman: The hour already having arrived, you will please come to order. I will just say that the first paper on this program for the afternoon is "What Should the Annual Report of Food Executives Include?" by Dr. William P. Cutler of Missouri. I am sorry that our commissioners are not all in here.

I am going to ask Commissioner Potter, as the commissioners come in, to see that they get a copy of the "Preliminary Report of the Dairy and Food Commissioner of Pennsylvania for the year 1911." Then, when it comes to the discussion of Dr. Cutler's paper, you will have before you a leaf from this report, and if there is essential data that ought to be in there, you will rip into it, and I will take it kindly.

WHAT SHOULD THE ANNUAL REPORT OF FOOD EXECUTIVES INCLUDE?

By W. P. Cutler, M. D.

As the subject is stated, it is easily a question what should be included in an annual report of a food executive. As the same is a permanent record to go into most of the public libraries, as well as into the libraries of all food control officials, and in many instances the private libraries of individuals, certainly to be used by most food purveyors and a large number of attorneys as a reference book, the report should tell the truth, possibly the whole truth, and certainly nothing but the truth.

The first consideration as to what such a report should contain is what the law of a given state requires.

For example, the law of the State of Missouri reads as follows:

"The Commissioner shall make an annual report to the Governor, on or before the first day of January of each year, which report shall be printed and published. Such report shall cover the work of his office for the preceding year, and shall show, among other things, the number of specimens of food products analyzed, and the report of the analyst upon each one when the analysis indicates the same to be contrary to law; the number of complaints entered against persons for violations of law relative to adulteration and misbranding of food and drugs; the number of convictions had and the amount of fines imposed therefor; an account of the money received and expended by him and his assistants, together with such recommendations relative to the statutes in force as his experience may justify. The Commissioner is also authorized to prepare, print and distribute a monthly bulletin containing the results of inspections, the results of analysis made, or caused to be made, with proper explanations of the same, and such other information as may come to him in his official capacity relating to the adulteration and misbranding of foods and drugs so far as he may deem of benefit and advantage to the public; also a brief summary of the work done during the month by the Commissioner and his assistants in the enforcement of the laws of the state."

In this case, the law is mandatory and must be followed, and to my mind practically covers the field in a report. If appropriations in other states are as they are in Missouri, I would say that the first consideration in preparing a report should be its compactness or brevity. Because of a lack of appropriation, the writer is compelled to forego the pleasure of halftones of notable persons, including himself and his assistants.

One important feature of the Missouri state report, to my mind, is in the recommendations which are required. It has been found that the Legislature treats seriously such recommendations, in that they are at least considered. While results are not always obtained the first time, an impression is made which frequently leads to good results. It will be observed that the Missouri law says that such work shall cover the work of the office for the preceding year, and then goes on to indicate practically what is meant by this. It shall state the number of specimens of food analyzed and the report of the analyst upon each one. This means, I take it, that the report is to show not only the character of the violation, but who is responsible for the same, to the end that the public may be warned against that particular article of food; and I am glad that the Missouri law requires this, because I believe the public should be warned against flagrant violators of the law, and the commissioner has the authority to so publish in the event that the violator has no cause for complaint.

In our extensive inspection of the milk supply of St. Louis,

the department, out of over eight hundred inspections, found about three hundred violations. In detail, this will be published in the annual report as it has been in the bulletins, and people can know by this means who have been indifferent to their rights.

It will be noticed, too, that the number of convictions and the number of fines imposed therefor, are required to be printed in this report. I do not observe that this is being done in some of the reports which come to my desk. I consider it a very important part of the report. It may be that all commissioners not being required to do it by law, consider it unnecessary, but this is certainly an important piece of information for the consuming public. It is true that few prosecutions, comparatively, are necessary in Missouri, because it is the policy of the department to suggest the remedy without prosecution; but when a suggestion fails, prosecution ensues, and it is rare that we lose a case in court. People who will not get right should be prosecuted, fined, and the results made public.

The financial report is, I believe, common to most all annual reports. A good many details which are published in the bulletins of the department are only summed up on the annual report. I think it is a very good plan to print bulletins through the year, giving detailed information, and as these bulletins usually go to the same persons who receive the annual report, a brief recapitulation of the yearly work is necessary.

I feature the recommendations and then, as in the report for 1911, give a summary of the year's work, and then some discussions of the same. Every year brings out some particular situation of interest. The last two years, we have been, in the summer time especially, looking after eggs that are unfit and grading cream.

One feature of the Missouri report, which I do not see in other reports, is the reference to exhibits given by the department and addresses delivered before the high schools, commercial clubs and various manufacturing associations. Again I thought it very proper to indicate the number in pounds or packages of the articles of food condemned and destroyed in 1911. Frequently the Missouri Food and Drug Inspection Department destroys a great many articles of food without resorting to prosecution.

Every circular of information relative to the rulings of the department is published in each annual report. Also, a summary is given of the conditions of each town visited.

In some reports, I observe extracts or articles on various subjects pertaining to foods are published. As to whether this should find a place in the annual report of a food commissioner or not must necessarily be left to the opinion of the individual publishing the same, and upon the amount of appropriation possible, and the requirements of the law under which the report is published. A great many valuable articles are printed which should be made of permanent record for the sake of reference, and might easily find a place in the annual report of the department.

The Chairman: Now, gentlemen, you have heard this paper of Dr. Cutler's and this is a very important subject. I have no doubt in going over the annual reports that come into your office you find, if you study them closely, what you may consider very essential things are omitted. Now, I had a few of our annual reports of 1911 sent out here, and I feel that this is a very important question, and I trust that the commissioners will just take and riddle this report from Pennsylvania, if you can do it, as I am anxious to know what ought to be in there that I have omitted, and with Dr. Cutler's paper we ought to be able to get our reports so as to leave out a lot of non-essential things and get more essential things into our annual reports, and it may be well to have everything there imprinted, the prosecutions instituted, what they were for and what the nature of the violation was and how they were terminated. This paper is now open for discussion. Somebody open it.

Mr. Potter of Connecticut: Not to discuss this paper in particular, I think you asked us to discuss this preliminary report of yours.

The Chairman: No; I don't want to be misunderstood. The discussion is on the paper of Dr. Cutler, and is as to what an annual report should contain, and, of course, we mean by that the essential things that the annual report should contain, and if our report is deficient and lacks essential things, riddle this report and bring it out and make our annual reports more beneficial and instructive.

Mr. Potter of Connecticut: In discussing the proposition, I think an annual report should give information to the public that would be of value to them; for instance, I notice in

this report canned corn put down as "unwholesome" on page 38, about two-thirds of the way down the page. Now, there is nothing there to inform the public why this canned corn was unwholesome, and farther down it contains a description that it is decomposed and unwholesome. That is explained very thoroughly. I think that the annual report is looked at more and read more perhaps than the bulletins are; for instance, a resident of your state or my state wants to know what the commissioners are doing, and the results of their work, they would naturally look at the annual report for an explanation of what the department had been doing, and the results obtained, and I think the article should contain how the food was adulterated. I have nothing to criticize in the paper as read by Dr. Cutler. I think it has covered the subject very thoroughly, except I wish to emphasize the fact that an annual report should show the public just what the department is doing and the result of their work.

Mr. Brown of Tennessee: I would like to ask, with the consent of the house, to interrupt the program for five minutes for the purpose of introducing Mr. Small and Mr. Wood, who represent the fish industries, who are directly responsible for the trip on Friday of the members as a general body to visit their plant, who will talk about the fish industries in Washington.

The Chairman: If there is no objection, five minutes will be given.

Mr. Small: I am delegated to invite you on behalf of the salmon packers of Alaska and Puget Sound to accept their invitation for a trip up the Sound, which, of itself, will be a trip of a great deal of interest. At the end, we intend to show you the private workings of the cannery, and we will take your body to the cannery at Bellingham, the largest cannery in the world, and Mr. Dunn, who is at the head of the corporation, has kindly consented to arrange so that the active packing will be going on while you are there, and every facility will be given to you to ask questions to get right down to the inner workings of the factory. We are a law abiding factory and do our best to conform to your ideas and we have absolutely nothing to conceal, so that we are more than anxious to have you come and see the active working of it. It is a large factory and our industry is represented in every state in the Union, and it is a growing industry, and I might just give you a little idea as to the extent of this industry. The next year we expect to turn out 2,000,000 cases of salmon right on this Sound, and that represents ten or twelve millions to the manufacturer. The fisheries in Alaska do not materially interfere with the canning on the Sound, so you can clearly understand the whole operation by seeing this cannery in operation, and there will be members of the canning fraternity on the boat and we will invite every question that will be possible to ask, and we will do what we can to give you as clear an answer as we can, and we trust you and the ladies accompanying you will take advantage of this invitation, not because we think it will only be the pleasure of the trip, but a matter of instruction to you, and we believe you will think so when you get back to your states.

You may want to carry out your work on the boat. A portion of the boat can be set aside, with the exception of during the meal hour, for the work, so that you can carry on your work right on the boat. We leave at nine o'clock at the Colman dock, and I would appreciate it if you can send the names of the people who will go.

A Delegate: How long will you be gone?

Mr. Small: Until 10:30 in the evening. We arrive at the cannery between two and three o'clock.

Mr. Allen, of Kentucky: Would it be possible to join that boat, and leave along the Sound for Victoria?

Mr. Small: You can go on to Vancouver.

Mr. Allen: You can't leave it?

Mr. Small: At Bellingham; we arrive between two and three, and there are trains going right through Bellingham and one goes through there in the evening, the night train.

The Chairman: May I say at this time, we are talking now of an automobile trip. Gentlemen, we are wasting very valuable time here. Now, let us go on with this program, and let us get down to effective work. We have work enough here to keep us here until Saturday evening, without any automobile ride, and let us hear this discussion with reference to this paper of Dr. Cutler's, what an annual report should contain.

Mr. Flanders, of New York: A few words on what a report should contain. I assume this to mean that we are at liberty to discuss not only what the law provides, but what it should provide. Presumably we have been putting in our annual report something not authorized by the statute. Shall I take the ground we are contemplating drawing a statute?

In my judgment, every annual report should contain a full detailed account of the work performed, for this reason: That publicity has much to do in producing a public sentiment that backs the official in his work. If the public knows and realizes you are doing a strong work in its interest, the public is ready to back you in that work, and if you do not publish it fully, so they may know and realize what you are doing, then you are apt to be figuring what you ought to do, and our influence is apt to wane, and I think it is absolutely necessary for the progressiveness of the work.

The Chairman: Anyone else anything to say on this paper? If not, we will pass on to the next, which is "The Public Press as an Agency in the Pure Food Cause" by Hon. James H. Wallis, of Idaho.

Mr. Wallis, of Idaho: I will state that I had prepared a most exhaustive paper on this subject, and gave it to a stenographer at the Savoy Hotel to typewrite, but I presume you must have gotten into her confidence, as I think I have heard it all discussed on the floor this morning. I will furnish a copy to the stenographer.

Mr. Flanders, of New York: Is Mr. Wallis' paper now open to discussion?

Mr. Wallis, of Idaho: I am willing to talk it to you.

The Chairman: Oh, yes; talk it.

(During the discussion, the paper referred to was handed to Mr. Wallis.)

THE PUBLIC PRESS AS AN AGENCY IN THE PURE FOOD CAUSE.

By James H. Wallis.

It has been said that not infrequently a person is found in this world who knows less about the business in which he has been or is engaged than he does about most any other kind, and possibly that is true in my case. I have spent a number of years in the ranks of journalism, and I beg to assure you that I, at least, quite well understand the ups and downs of the profession in its various phases. In view of this, I am sure that it is quite proper for me to assume that I understand and fully appreciate the very unique position occupied by one who wields the pen in connection with the public press.

My many years' experience and observation in newspaper work has brought to me quite a vivid realization of the power and influence of the press for good or ill in whatever cause. The influence of the press along any line, one way or another, cannot be gainsaid. It is indeed a moulder of public opinion. In fact, it is more than that. It is sometimes a most potent factor in the shaping of the destinies of nations as well as of individuals. In fact, the press that is not conscienceless can, with its very great power, a power peculiar to itself, work wonders for the good of mankind.

To become the editor of a newspaper, or of any other periodical for that matter, is to assume a tremendous responsibility, and the man whose conscience is more or less morbid and who is unmindful of the importance of his profession is a moral misfit and is woefully out of place in an editorial sanctum or on a reportorial staff. We sometimes encounter such an individual in our official work.

All of this may not seem to you to be germane to the subject assigned me. However, I am of the opinion that it is, in a way, because it is a fact that in every phase of human activity in every community there is reflected in the people generally, in a measure at least, the sentiments of the press in that community, either for or against a cause, no matter whether the course taken by the editor of the paper be wise or unwise. Each and every newspaper becomes so closely allied with the interests of its own immediate section that it is a part of and one of the essential elements of the life and character of that section, hence the people constituting its constituency look to it as an index of opinions and for guidance in most of the material things of life. The newspaper should be the instructor and protector of the people, and that it is generally doing a splendid work along this line is acknowledged. This is particularly true in all questions involving such vital matters as the health and lives of the citizens. That the press has been particularly active along these lines and has rendered an incomparable service to humanity in the advocacy of sanitation and pure foods is fully realized and inexpressibly appreciated by the general public, the positive beneficiary of the very decidedly humanitarian work on the part of a highly considerate press. It has been found with few exceptions in the front rank in every crusade against unwholesome and impure food stuffs, ever on the

alert to warn and protect the consuming public against anything and everything deleterious to health and consequently to the very stability of citizenship itself, as well as to advise its readers of the urgent need of precaution along other lines affecting the lives and well being of the people.

The fully demonstrated potentiality of activity on the part of an honest and courageous press in any movement calculated to secure for the people a better environment and bring about a more tolerable way of living, cannot be overestimated. In its vast scope of multitudinous labors, the State Department, which we have the honor to represent, would have fallen far short of what it has been able to accomplish had it not been for the very cordial and vigorous support given by the newspapers. Our efforts to promote sanitation, protect health and secure purer food products would have been of much less avail had not the splendid assistance of the press been forthcoming; and yet it is sometimes the case that in some instances articles have appeared which have been greatly overdrawn and distorted, carrying the impression to the public that we were harsh and sometimes even cruel along some lines in the prosecution of our work; whereas had the bare facts been published, they would not in any degree have borne out the assumption that we



JAMES H. WALLIS,
State Dairy, Food and Sanitary Inspector of Idaho.

had pursued an improper course. Sometimes we are misquoted in relation to our work, and not infrequently one of these excepted newspapers jumps at a conclusion concerning our activities, making it exceedingly embarrassing to our department. And yet our efforts have always been to secure equity, justice and protection to individuals as well as to the public at large in all their legitimate rights. While we are usually credited with the authorship of articles appearing in print concerning the activities or work of our department, not always have we given out for publication statements that have from time to time appeared in the press, or at all, and I am constrained to express the opinion that it would be far better if the editors of these papers would more frequently take us into their confidence in order that they may be put in possession of the facts in cases involving the department because of the tremendous bearing exaggerated or false statements have on our work. I believe I am safe in assuming that the editors in question have been either careless in these matters or have chosen to exhibit their contempt for our work, a regrettable fact, indeed.

In regard to the publicity of our work, I desire to urge that whatever is published concerning it should be the plain,

simple truth, and nothing more. The imagination should never be drawn upon in such matters. False, misleading or derogatory statements in relation to the work of our department especially poisons the public mind against it and the harm to the splendid cause in which we are laboring is more irreparable. Even limited public disfavor in any work is a tremendous handicap to the cause it refers to.

In such serious problems as those involving the health and lives of the people, the fullest measure of consideration should be given by the individuals into whose hands officially are committed these vital interests, and the earnest co-operation of the press should at all times be forthcoming and be eagerly sought.

I really feel that sometimes the motives and acts of representatives of our department are very much misunderstood and therefore misconstrued by the press, and as a result a false impression is given to the public. In view of this, great care should be exercised. Sometimes we are misquoted, and are then held responsible for the articles appearing in print. Sometimes an editor, or his representative, imagines that in the prosecution of our work he has discovered a plot on our part against certain individuals, and so he informs his believing readers, contending that a great wrong has been done, and that we are injuring business by giving publicity to the act or transaction complained of. Of course this is wrong from any viewpoint. Let me urge the utmost precaution on the part of the editor or reporter in the matter of an interview.

The press, however, as a general rule, is very zealous in its support of our work. The ambitious reporter on the daily paper invaded our presence with a pleasant demand for a story. Knowing the potency of publicity, we hand him over a few facts about the arrest and punishment of some offender of the food laws, and are sometimes mortified when the paper appears to see the transaction written up in flaming style, with a big head over it, calling attention to the "short weight artist," or the "pure food crook," or the "poisoner of the children." Often we are led to register a solemn vow that we will never give out any more information to the press. We know that the average business man is neither a crook nor an intentional violator of the law, and it is hard to make such see that the language of the paper is not the views of the official himself. It is this feature of yellow journalism that does more harm than good. But I am glad to know that it is the exception and not the rule. It would be the safer plan to do our own write-ups, where such an arrangement can be made with the press. Still, after all, it is the fear of publicity and not the amount of the fine imposed that makes the man who would do wrong toe the chalk line; it is this that puts the fear of God into his heart.

Not always can we get the publicity. The small country newspaper hesitates about giving to the public the facts connected with the arrest of some business man in the community, for fear of losing his advertising; while the powerful dailies are sometimes controlled by political influences, and stifle information which belongs to the people. Commercial interests are sometimes powerful enough to enlist the cause of the press in a warfare against us when we attach the sale or use of some deleterious or harmful food product or substance used in the manufacture of food products. If we are courageous enough to brave such onslaughts and prosecute our work, these same influences work through the columns of the venal press and other channels until they finally "get our heads."

It is, I might say, needless to assert that in our work we have only the highest and best interests of the people at heart, and to the end that the best and purest things obtainable may come to them we are earnestly striving, with no thought of a personal character and far removed from any other consideration that might be at all questioned. We must have the earnest, honest co-operation of the press, to accomplish the object for which the laws we are enforcing were brought into existence. Mutual effort to this end can have only a result of infinite importance.

My friends, I desire to reiterate that the press more than any other agency, aside from the department itself, can aid or retard sanitary science and the saving of life, because it is one of the most ready mediums through which an appeal to the minds and hearts of the people may be most successfully made. The man with the pen has a splendid opportunity for righteous achievement. In my judgment, no better or grander work can be done by the press in the interests of a general uplift than to be ever on the alert to warn the people of the dangers that here and there beset them, and to the end that lives may be protected and the standard of our citizenship improved. Our department certainly has a great mission, and the press everywhere should

have a very decided part with it in the humanitarian work in which it is engaged.

Sanitation and health preservation are as old as the human race, and there seems to be no plausible reason why a fairly comprehensive knowledge along these lines should not be possessed by even the humblest citizen in the land, in any walk of life, and of ordinary intelligence. Our work is largely a campaign of education, and the press can and does play a very important part in inculcating into the minds of the people the necessity for better conditions, better foods and better modes of living.

One authority says that the human race even today, however, is only 50 per cent efficient, that we live out less than one-half of the natural duration of life, that we consume twice as much food (and much of it mighty poor food), as is needed to maintain efficient life, that we waste as much as we use, and that one-half of human beings born into the world either die before reaching maturity or fall into the defective, delinquent or dependent classes. When we look over these statistics and also take into consideration the appalling and shameful fact that about 52 out of every 100 persons die annually in this country from preventable diseases, we cannot but fully realize the very urgent necessity for stringent measures strictly enforced to protect and conserve health and life, and the vast importance of a ready medium, such as the press, through which to convey to the people knowledge of the dangers that lie around them on every hand.

As I have already said, the most intimate relations should exist between us and the newspapers, the sure agencies through which the people largely receive their information concerning our work, and in view of the very positive and peculiar nature of his duties, the health and sanitary inspector should in all his activities be open and above board to the last degree, ready to give to the public through the press any and all the information to which it is reasonably entitled.

The press would do well to remember this injunction in its attitude toward our department and its work: "Sustain and Abstain." It should sustain us in every righteous undertaking and laudable purpose in behalf of the people, and abstain from criticism of our work until it has made a thorough investigation as to the merits of the case in question. (Applause.)

Mr. Emery of Wisconsin: I have been thinking so strongly that this paper has so completely and adequately presented this subject to the body that any farther discussion on the subject would hamper rather than benefit. (Applause.)

Mr. Hansen of Nebraska: In closing the debate on the subject, and as a new member of this association, I ask you to pardon me. I have been assisting time and again during the last years of my life, and especially now, and I think the paper read as regarding the press is a most beautiful attempt to show the way to you men just how to take care and take charge of the publicity end of your business. I have had some trouble along that line in my short time as the Food Commissioner of Nebraska, and I have found also statements in the paper, that when the truth has been carefully given to the newspaper as regarding conditions, if it desired to publish it, that it has invariably resulted to the best interests of our department, and here is such a splendid article, such an able and effective outline of what that work ought to be, though I know I will be making a maiden speech, I trust you will excuse me for that, but I do want to emphasize that it is a most able paper, and very useful on that subject.

Mr. Bailey of Oregon: I am not for a moment going to undertake to discuss this, as Mr. Emery has said, it is beyond discussion, and I believe a paper of that kind and of that importance should reach, if possible, every institution in this land, and I, if it were possible to have that printed and have a copy put into such hands that it would reach the institutions of this coast, and all over the country, I would like to have that done. Now, I don't know whether to put that in the form of a resolution or motion, but if it is in order, I make a motion.

The Chairman: I suggest that you draft a resolution and present it to the body probably tonight.

Mr. Bailey of Oregon: That paper ought to go to every institution in the land and then it would give them a chance, if they would, to publish it.

The Chairman: I will just say for the benefit of Commissioner Bailey under our tentative constitution that resolutions must be presented to the main body, and make it out in that way, or present a resolution tonight.

The next subject is "Creamery Inspection and Its Organization," by Hon. B. H. Rawl of the District of Columbia.

Mr. Rawl of the District of Columbia: Mr. President, and

gentlemen: I just came out of one creamery meeting, but I believe it is big enough subject to supply probably two or three. I have prepared a paper on this subject, but I do not know that you feel any more like hearing it, than I do like reading it, but I will give you a few samples of it, at any rate, and if you do not like it, you can kick. How about that?

The Chairman: Go ahead.

CREAMERY INSPECTION.

By B. H. Rawl.

The creamery originally was a plant in which only butter was manufactured. In more recent years the so-called creameries have a much wider use. In many cases ice cream, condensed milk, and numerous other products are manufactured in addition to butter. Creamery inspection as discussed in this paper, will deal primarily with plants used for the manufacture of butter, but for plants where other products are manufactured the same plan of operation would apply in the main.

Please bear in mind that we are dealing with the subject from the standpoint of the inspector rather than that of the operator of the plant, though it is necessary for us to consider



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the entire operation of the plant in order that we may determine intelligently the possibility of inspecting it effectively.

PURPOSE OF INSPECTION.

The purpose of inspection is to insure to the consumer a clean and wholesome creamery product.

Requirements necessary for the production of a clean and wholesome product. These requirements may be divided into two general groups:

- 1: Equipment.
- 2: Methods.

Equipment.—The character of the equipment of a plant is of the utmost importance, because without proper equipment it is impossible to produce a clean and sanitary product regardless of the quality of the raw material or the methods used. This does not mean that the equipment must necessarily be of an extremely expensive sort, but instead that it shall be of such a character as to make sanitation both possible and economical. The following considerations in this connection are among the most important:

The arrangement of the building should be such as to make sanitary conditions possible.

Floors should be of cement of similar material. Walls and ceilings should be tight and of such material that they can be washed, preferably cement.

There should be ample light.

There should be good ventilation in order that the plant may dry out readily, that obnoxious gases, steam, etc., may pass out at once and prevent bad odors being absorbed by the products,

and also prevent steam condensing on the ceiling and dropping down into the products.

There should be ample sewerage leading entirely away from the plant, and properly disposed of.

All doors and windows should be screened so as to keep out flies. It is not unusual to see a can or vat of cream with any number of dead flies in it.

There should be a toilet and lavatory somewhere in the building properly located so as not to be a source of contamination.

The plant should be equipped with machinery that is of such type that it can be cleaned readily.

With proper equipment the only thing else necessary for the production of a clean and wholesome produce is proper service.

Methods.—The methods employed in operating the plant may be divided into three classes:

1. Selection of the raw material.
2. Manufacturing and preparing for shipment.
3. Cleaning the plant.

Selection of Cream.—Since the quality of the raw material is dependent upon the conditions which surround it prior to its arrival at the creamery, it is only the character of the service at the creamery, that determined whether or not the material shall be accepted or rejected.

Cream is sometimes produced under filthy conditions. It is often held for several days in a cellar or kitchen, where it may absorb all kinds of bad odors. Then it may be shipped long distances in hot cars and stand in the sun for hours at changing or loading points. It is often the case that when cream reaches the creamery, it is in a filthy and decomposed condition, offensive to the taste and smell. It is not an uncommon thing to find a cheesy black sediment in milk or cream, and a considerable portion of this sediment is cow manure. I am sure that nobody would care to eat butter made from such cream if he knew it.

With the keen competition for cream most creameries are unwilling to reject such cream, although they would greatly prefer not to handle it. If all creameries would reject bad cream the farmers would stop producing it, for it is to the advantage of the farmer as well as to the creamery to produce good cream.

Manufacturing and preparing for shipment.—The methods in this part of the operation require but little discussion. Compulsory pasteurization is one of the most important needs in this connection because it destroys disease germs that will live for months in butter and also because it makes possible a product with better keeping qualities. Aside from this a sufficient amount of help under the direction of skillful butter makers is all that is required.

Cleaning Plant.—The service required in this part of the operation needs no discussion. Sufficient help, properly directed, will keep the plant clean, if it is the right kind of a plant.

It is not difficult to specify what kind of equipment and what kind of methods should be employed in a creamery in order to produce a clean and wholesome product, but the main consideration is, can we maintain a system of inspection at a reasonable cost that will assure to the public that the proper equipment and the proper methods are being employed in the creameries? Let us consider them separately.

INSPECTION OF EQUIPMENT.

This phase of the inspection offers but few complications. With a law granting sufficient authority for the issuing of regulations which shall specify in detail what conditions must exist in such a plant, the quality and kind of material of the floors and the walls, the amount of light and ventilation, the kind of sewerage, etc., and, in a general way, the character of the machinery, it would be necessary only for the inspector to visit a plant and go over it in detail, just as though he were using the score card now in general use for scoring dairy barns, milk plants, abattoirs, etc. It would be readily determined in what particulars the building or equipment was in any way below the standard fixed by the regulations. The law, of course, would have to provide severe penalties for the violation of the regulations. In inaugurating a rigid system of inspection of the plants, there would naturally be required some time to enable the operators of the plant to make such changes and alterations as would be necessary to conform to the regulations. An undue severity at the beginning would be unnecessarily expensive to the owners of the plants, but with a little time allowed for the building of new floors or for changing gradually the old plants to meet the requirements of the regulations, it would not be a difficult matter to adjust the buildings and equipments to a standard

that would make them entirely satisfactory from a sanitary standpoint.

INSPECTION OF METHODS.

The inspection of methods is much more complicated than the inspection of equipment. The latter requires only a consideration of permanent fixtures that remain the same day after day, changing only with the normal deterioration of the plant. With the inspection of methods we look for the efficiency of individuals, which may not be the same when the inspector is present as when he is absent.

There are two systems that may be used in an inspection of methods. With either system, ample authority of law providing for issuing regulations and penalties for violations are, of course, absolutely essential.

First, the inspector remains in the plant during the entire time that it is being operated, just as is done in the packing houses having Federal Meat Inspection. There, every operation of the plant is done under the eye of the inspector. For a perfect inspection service, this is the only absolutely satisfactory method.

Second, the inspector visits the plants frequently and at times when the operator is not expecting him. The quality of the cream received during these visits would be an indication of the kind of cream the creamery is in the habit of accepting. If the creamery was in the habit of carrying out the regulations and refusing decomposed and objectionable cream, the farmers would soon stop delivering that kind of cream. In this way the inspector would soon regulate, to a large degree, the kind of cream that was to be accepted. The manufacturer would find it greatly to his advantage to co-operate with the inspector in this matter, for it is not to the manufacturer's interest to use low-grade raw material. The sanitary condition of the plant could be reasonably well determined during these unexpected visits. Pasteurization, which should be one of the important requirements, could be enforced by means of an automatic thermometer attachment which records temperatures and indicates to the inspector whether the process was being properly carried out. If a plant was found to be negligent in complying with the regulations the inspector should make more frequent inspections, and these, with a few prosecutions, would probably bring it up to standard.

Of the two systems of inspection, while the first would be more efficient, the cost would apparently be prohibitive. There are about 6,000 creameries in the United States, the large majority of which are small, while the packing houses which have such inspection are large and comparatively few in number. The plan of having the inspector visit the creamery frequently and when the operator is not expecting him is apparently the only feasible method of inspection.

A STANDARD FOR CREAM.

While it would not be very difficult to specify how the plant should be cleaned or how the product in course of manufacturing should be handled, when it comes to making a standard for cream—when it may be accepted and when it may be rejected—much more difficulty will be experienced. Of course, the basis of such a standard must be wholesomeness. Up to the present time the standard of excellence has depended very largely upon the amount of acid in the cream. However, we understand that this is not necessarily a reliable index; we recognize that cream that is produced under sanitary conditions and kept at high temperature will sour very quickly, and the acid in such cream may not necessarily indicate uncleanness. On the other hand, it is to be supposed as a general rule that where the producer of cream knows enough about the requirements for the production of good cream to keep it thoroughly clean, he knows enough to keep it cooled down to a temperature that will prevent the rapid development of acid. It is not far wrong, perhaps, to say that where we find a high acid in a cream that is not very old, it is an indication of dirt.

But there are manufactured into butter each summer thousands of cans of cream that is bad, decomposed, and filthy, and that to the ordinary eye would be regarded as unfit for human consumption. This class of raw material should be prohibited by regulation, which regulation, if not complied with, would result in the withdrawal of the inspection, thereby preventing the transportation and sale of all products from the plant in question. In the present Federal meat-inspection act the provision for the withdrawal of inspection has been found to be a most effective means of enforcing the law. If each violation had to be handled in the courts, it would be difficult to enforce any cream standard.

ORGANIZATION OF INSPECTION.

The creamery inspector should have ample time to give careful inspection to each plant in his territory. What num-

ber of plants an inspector could handle would depend upon the facilities for travel in the territory as well as in the character of the plants. Under some conditions one inspector may have his hands full to give sufficient attention to 10 or 12 plants, while under other conditions he might be able to inspect 20 to 25; possibly more. The local inspector need not be a very expensive man, so long as he has good common sense and is absolutely honest and tactful. Over the local inspectors of a given territory there should be a chief inspector, who is thoroughly qualified to deal with any questions pertaining to creamery operations that might arise. His time should be divided among the local inspectors, giving particular attention to the men who are not giving satisfaction and to new men; and he should handle all the unusual difficulties that would arise from time to time.

DO WE NEED INSPECTION OF CREAMERIES?

The object of creamery inspection is the protection of public health, but such inspection is expensive, and the consumers must in some way pay the cost. The question that naturally arises, therefore, is, will the protection be sufficient to warrant the expenditure that will be required? If we knew the exact condition of every creamery in the country it would be less difficult to arrive at an answer to this question. Very sensational, exaggerated and unwarranted statements are often made regarding the sanitary conditions of plants where food products are manufactured, and such statements often do harm; so let us be careful to look for facts and base our conclusions upon them. Some of our creameries are good; they are well equipped and well managed, and the products from them are probably as good as they would be under any system of inspection. What per cent of the total number are in this class it is impossible to say.

There are others, however, that are not in good condition; they are improperly constructed in the first place, and they are improperly operated in the second place. They are filthy and entirely unfit for the manufacture of human food. They are operated probably by men who have no regard for sanitation, particularly since the consumers of the product live possibly a thousand miles from the creamery. What we may term bad creameries are not all bad because of the same reasons. Some use large quantities of very bad raw material, some do not pasteurize their products, others have filthy conditions throughout the entire plant.

That creamery products do carry the germs of disease is absolutely beyond question. That many creameries not only do not destroy by pasteurization the pathogenic infection that may exist in cream, but add more through the insanitary conditions in the plant, is equally beyond question. What per cent of bad creameries there are it is impossible to determine at this time, but it is safe to say that they are more or less common. The condition of butter does not as a rule indicate to the consumer whether it is clean or not, any more than a steak indicates the condition of the slaughterhouse from which it comes.

It is impossible to term in dollars and cents the value of human health and human life, but considering all of these facts, it seems decidedly inconsistent that we should give as much attention as we do to the inspection of our meat food products, which are seldom if ever consumed (in this country, at least) in a raw state, and at the same time pay little or no attention to our creamery products that are usually uncooked when consumed. If the inspection of meat food products is of sufficient importance to the public health to warrant the expenditure necessary to conduct it, it would certainly seem that we would be justified in demanding a thorough creamery inspection.

STATE VS. FEDERAL INSPECTION.

Federal inspection, as in the case of the meat inspection, would have to be based on the interstate and foreign commerce clause of the Constitution, and could be applied only to creameries doing an interstate or export business, although such plants might at the same time, also sell their products within the state. State inspection would cover the plants not reached by Federal inspection, that is, those selling their product entirely within the state.

It is probable that neither state nor Federal inspection alone would be an entire success. Under Federal inspection a plant could not put out goods that are not eligible for interstate shipment. If the state in which this plant is located does not maintain a rigid system of inspection for plants supplying the local trade, it is but natural that the inferior product that would not pass inspection for interstate shipment would drift into the local plants doing a local business only

and to be used for local consumption. It is often the case that a creamery is located near the state line and is shipping the bulk of its product outside the state. If the state inspector should object to certain conditions or products in that creamery the creamery would at once ship all of its goods over the state line, and so remove its products from the inspection of the state in which the plant was located, unless this was prevented by Federal inspection.

The question would naturally arise in dealing with a case of this kind, "Why does not the state into which the goods are being shipped prohibit the admission of such goods?" The answer is that in many cases the state into which the goods are shipped is a thousand or more miles away from the state in which they were made. On the other hand, if there were only Federal inspection which applied only to plants producing goods for interstate shipment, the remainder of the plants producing goods for local consumption would naturally receive all the raw material that could not be accepted in plants having Federal inspection. This has been shown in the meat-inspection service where the Federal inspection often causes sellers to send their diseased stock to uninspected plants doing a local business only. The solution of this question undoubtedly lies in a system that included both Federal and state inspection, independently, but with laws and regulations that are similar, so that the two might work hand in hand for the accomplishment of a common end.

Such a system would require the states to maintain an inspection that would be as efficient as that of the Federal Government, or vice versa. As a rule this would place no great burden upon the state, since the great majority of creameries in most states do an interstate business.

An important feature of Federal inspection as set forth in the meat-inspection law is that railroads are prohibited from transporting from one state to another any goods that do not bear the stamp of approval of the Government. Thus, when the law is not complied with, inspection is withdrawn, and interstate shipment must cease. This makes it unnecessary to enforce regulations through the courts, and the system is very effective.

If it is legal to apply the same system in state inspected plants and prohibit them from offering for sale any products that do not bear the stamp of approval, it would be very effective.

WILL CREAMERY INSPECTION CRIPPLE THE DAIRY INDUSTRY.

If there is no need of the inspection, if all conditions that surround the manufacture of creamery products are just as good as they need to be to protect the consumer, then most assuredly inspection will do no injury to the industry. But such is not the case. Conditions are not what they should be in many cases, and it will cost something to correct them. For example, the creamery with half-rotten, wooden floors would be required by a thorough system of inspection to put in new concrete floors. The creamery with no pasteurizing machinery would be required to install such machinery. The farmer who has no equipment for properly taking care of his cream would be required to provide it. All these things will cost money. But will not the industry as a whole be much better off when such equipments are provided? The consumer will have more confidence in the purity of creamery products than he has now.

A more important consideration, however, from the standpoint of the welfare of the industry, is that the creameries because of the equipment that an inspection system would require would be able to produce a far superior produce, which in the end would sell for more money. The effect of a thorough inspection of creameries is analogous with the effect of the tuberculin test upon the dairy herd. It costs something to apply the test where it is really needed, for in such cases animals always have to be sacrificed; but when the permanency and the integrity of the business are considered it is impossible to do without it. And so the creameries that really need inspection are those that have not the proper equipment and perhaps the proper skill to best take care of their own interest.

A thorough system of inspection will prevent the wide range in quality of raw material and in this way will eliminate much of the inferior butter that is now made.

The creamery industry of the United States would unquestionably be better off with a thorough system of inspection than it is today. True it is that there are creameries that do not need inspection; but there are men for whom criminal laws are useless insofar as they affect them directly, yet these men above all others recognize the necessity of such laws for their own protection. The creamery that will not be improved by inspection will be benefited by having its competitors, to a large degree at least, placed upon an equal basis.

A proper creamery inspection can do the creamery industry no harm.

CONCLUSION.

1. Proper creamery inspection would be a protection to the consumer.

2. This inspection would do no harm but on the other hand would be a benefit to the creamery industry as a whole.

3. An efficient system of creamery inspection is entirely feasible at a moderate cost.

There appears to be no good reason why the producer or the consumer should object to inspection.

Is the American public willing to pay the cost? (Applause.)

Mr. Emery of Wisconsin: We have been listening to a very able presentation of a very important and timely subject. I think the members of this Association will bear me out in the statement that what I have said before this Association on previous occasions—what I have had to say concerning the work done in my own state. However, at the present time Wisconsin ranks first of all the states in the Union in the amount of money received from her dairy products; she ranks first from the amount received from her cheese products, and also first from her creamery products. During the ten years I have been Dairy and Food Commissioner of this state, a large volume of the work of the department has been in the inspection of creameries and cheese factories of the state. There are 2,000 cheese factories, and a little over 1,000 of the creameries. I want to make my statement brief. The legislature of 1911 provided many very useful and beneficial laws, one creating a State Board of Public Offices, which clothed the board with authority to compel the authorities to investigate every department under the state government. Pursuant to its duties, it has called upon various officials to make a report upon the work of the department, and while that was a formal statement, it was in essence to justify this expense, and show what the department has done and is doing that gives us a right to enjoy life and the pursuit of happiness, and I was called upon to make a report of this kind, and the report, when completed occupied nearly fifty typewritten pages, and in it was a statement which I think justified Mr. Rawl's statement. It was not an injury to the factory, but it was an actual benefit. I will give you the figures, and you can draw your own conclusions. These men employed as inspectors are men thoroughly equipped in the cheese factory business, they are considered the best men in the state in the business, they know what a cheese factory is, and their inspection is thorough; it goes into everything connected with these cheese factories. This inspection has been going on, beginning ten years ago, only moderately, then we had five men and now thirty. My theory before the legislature in reference to it, was, let us get good men, and upon the theory that good men would benefit this work, and poor men would injure it. That work increased, and the number of men had to be increased for doing this work.

When I was called upon to set forth the work of the department, its benefit to the public and those concerned with it, and I will say one of the comparatively simple features of the work, and I am prepared to test my statement in this respect, was to find out to what extent our work had been of value to the producer of the cheese and butter in the state, and I proceeded in this way: There are men, wholesale dealers in cheese and butter there, and in Chicago, who have been acquainted with the history of Wisconsin dairying for forty years, known it from its beginning; men who began as dairymen, and one I have in mind, and another substantially the same, are wholesale dealers, and have been acquainted with the whole rise of the dairy industry, and it was to those men thoroughly familiar with the conditions ten or twelve years ago, who are in the business, making their living by buying it from the dairymen, and putting it on the market in the west. To get better acquainted with the industry, I telephoned and asked them whether in their opinion, from their own knowledge, and from their own experience, in going out to the factories and seeing what was done in the quality of the cheese and butter produced, the department in the past ten years had been of substantial benefit to the producers of butter and cheese in the state, and their answer was, "Yes"; never an answer "No"; absolutely. Then the question was, How much more in their judgment had the dealers in cheese and butter, and how much have those producers of butter and cheese in the state received for their products, because of the direct effect of the Dairy and Food Association—work which they have been doing in the inspection? They answered, first, it was a difficult question to answer, and we knew it was, and we asked them to give an estimate. The lowest estimate was one cent, and it went as high as three cents. One firm, con-

sisting of men that had been producing cheese that were put out of business, an estimate of one cent a pound, and they reminded us we put them out of business, having prosecuted them.

Owing to the better grade, and the incoming of the hand separator, they have conceded we have been benefiting the butter industry to the same extent we had the cheese, and they estimated it was from one to five cents, and one of the inspectors from Minnesota was willing almost to say ten cents, but we estimated on the basis of one cent. Now, estimating it from the information obtained from these men who are thoroughly acquainted with the business and handling this product for the last twenty-five years, and their statement was that the lowest producer of cheese in Wisconsin had realized from a direct result of our inspection, was one cent a pound, it amounting to the enormous sum of a million and a half dollars, and the amount saved directly to the purchaser in the inspection of these cheese factories, another million dollars, making a total of two and one-half million that was saved to the cheese and butter producers by the reason—directly in consequence of the work by the Wisconsin Dairy and Food Department in the inspection of those factories. (Applause.)

The Chairman: I would like to ask Mr. Rawl a question: In the eastern states, Pennsylvania, New York and Maryland, there are quite a number of places where they take rancid butter, good and bad, and by a process, produce and use a cream used in the manufacture of ice cream.

A Delegate: You don't want to forget Rhode Island.

The Chairman: Can it be detected by our chemists that it is so produced, and that it is an adulteration, and in violation of our laws? I know in New York, in the summer, ice cream is thus produced. What have you to say as to rancid, good and bad, and all kinds of butter?

Dr. Rawl: It looks as if the farther we go, the more complications we reach. Oleomargarine is serving some useful purposes. A case was called to our attention some time ago that in one of the renovating factories which we inspected, they had an order for the oil, the renovated oil to go to an ice cream plant, and the inquiry of the department was whether or not he had any authority, or if there was a law that prohibited him from selling that butter in that way. We found no way to prohibit him. I don't know whether any of the state laws can prohibit it or not. Of course, if they were to take good, clean, sound goods and use it in that way, they can produce a reasonably good product.

The Chairman: Isn't it fresh cream?

Dr. Rawl: It is not cream in the sense that the public knows cream, and the only way that I know that is feasible to reach this problem is under the old labeling clause. It is not sold bearing the label, and there you are. I don't know of any law at the present time that will enable us to prohibit that use, and furthermore I say, I do not believe it is fair to prohibit the use of good, clean products. I do not think if you use clean and sound fats in that way, and make that ice cream that is perfectly acceptable to the consumer, it should be prohibited, but on the other hand, if they do take rancid butter and oleomargarine, putting it back in with the skimmed milk and make it look similar to cream, and flavor it to crowd out to a large extent, the rancid—the decomposed elements—then I think the practice is wrong and should be prohibited, but I do not know how you will do it unless it is by labeling.

Mr. Bailey of Oregon: We had that up in Oregon, and they are doing that to some extent, but they tell me they use the very best of butter, and they only do that in the summer when they are short, and they tell me it is impossible to take a rancid ice cream and make it come up to the standard. They use it for a short time in the holiday season when they are short of cream.

Dr. De Barr of Oklahoma: I would like to ask Dr. Rawl if there is a rule in the United States Department of Agriculture with reference to the homogenized cream, for the purpose of making ice cream, and isn't there a rule with reference to the use of the renovated, applied in the same manner?

Dr. Rawl: Not so far as I know of butter. There is a decision. They got out a decision that the product made by this combined butter fat was not cream, something in effect to that, but so far as I know there is no decision. Of course that is just a decision of the board, as you all understand. It should not be called cream.

Dr. De Barr of Oklahoma: Can it be made into ice cream and labeled ice cream? That is the point we are very much concerned about. There is a New York firm that has been

submitting samples to our laboratory of what they call homogenized milk powder, or butter fat. They call it butter fat. It is really a powder, homogenized milk, and treated under the same process. They can give you the exact details, and they put that on the market and ship it all over the country, and name it "Butter Fat Powder." One is a plain powder, and the other is homogenized. We being in a warm country, as we are, have been having difficulty with the ice cream manufacturer. So far the ruling of our department has been that they cannot use it in making ice cream. We are going to stand pat on it, and we propose not to let them use that in the manufacturing of ice cream, and thus far we have prohibited the use of homogenine in making ice cream. Of course, if it is put into ice cream, it can be put under that definition. We understand that the regulations and rules of the department made are not necessarily Federal laws, but we did adopt them as our law, and they became our law, and we insist that they cannot use them, and thus far as fast as we find them using them we have gone after them. In some cases we have called all the ice cream manufacturers together, and I believe it is the general policy of the department not to let them use them.

Mr. Allen of Kentucky: The labeling of the composition is very simple, under both the Federal and state laws. Under the Federal ruling, Mr. Rawl, you say the regulations promulgated by the Secretary of Agriculture recognizes the butter fat and cream as two distinct products, therefore it becomes a compound under the National food law, and therefore it matters not what it is sold for, in what, and so on. It is a compound of butter fat and cream, and under the provision of the Federal law, which compels compounds, irrespective of whether you want to do it or not, to be labeled; it should be labeled, according to my way of thinking, butter fat or cream, or condensed milk.

Dr. Rawl: Under the state laws I think you will find the same thing. I think you will find ample laws to require those fellows to label. I think we should discourage to the very fullest extent, that industry, as here, in the first place, we haven't gone into the bacteriology of it to know where the whole toxin comes from. We have an undesirable prevalence throughout the United States of ice cream poisoning, which we know nothing about, which comes from unsanitary conditions. For that reason it should be discouraged. For an economic reason, for the benefit of the dairyman, it should be stopped. The man who takes stale butter by stale butter process that the dairyman has not bought and produced in the right way, reaps the profit, and the man that is handling it has the loss. However, if you can put the dairyman back, and produce the fresh cream for ice cream, you have put into the dairyman's pocket more money, and to the consumer a better product. Especially with this product, it should be our aim to discourage it, and tighten our laws as much as we can.

Mr. Allen of Kentucky: Speaking of that cream business and its effect upon the prosperity of dairymen, and taking an illustration in Kentucky a few years ago, which was forcibly brought to my attention, I remember that in our very largest dairying district, the Shelbyville district, in the summer time, they are not able to sell their ice cream; in fact, they said they had a surplus, and there weren't at that time any creameries in the district, and a surplus on the market, and I said to myself, I will make a market for it in Louisville, and we took it to the hotels and sold it at ten cents a glass, and took samples of ice cream, and they said, if we are going to use this, to let the dairymen live, you must put that product into the cream, and after they made the changes they couldn't get enough to fill their orders. The large hotels had been selling cream at ten cents a glass. It was five and six per cent, and it went back up to eight per cent, but it was out of reason to pay more than ten cents, and it cost them ninety cents to a dollar to get that cream, and I suggested to the dairymen, in fostering the industry, you will find with the amount of oleomargarine which we are up against—you will find if you enforce your laws toward requiring the restaurant man and hotel man to serve just what the dairymen are serving, you will find it will inure to your industry.

The Chairman: In Pennsylvania it is sold under a name.

Mr. Allen of Kentucky: Yes.

The Chairman: I will ask Dr. De Barr, Mr. Rawl says it is not cream.

Dr. De Barr: No.

The Chairman: Can it be detected?

Dr. De Barr: You can detect it by a microscope better than the homogenized. It has a little cell covering, and you homogenize it, or centrifuge it, whirling it so rapidly you break the cell, and you can't discover it because the little

stroma is not there. You can, by heating it, tell the difference, because that little covering is removed.

The Chairman: How are you going to establish your case and tell whether it has been filtered in the way of its incorporation into the milk? It does not incorporate into the milk.

Dr. De Barr: You will find certain portions of fat; it is dirty. Microscopically, you can discover it better than chemically, and you will find they have the same kind of covering as the cream. It is a slighter covering, and the other covering is continuous, like mucous of some kind.

Mr. McKinley of Illinois: Have you, in your law, promulgated a standard for ice cream?

Dr. De Barr: Yes.

Mr. McKinley of Illinois: What is the content?

Dr. De Barr: Butter fat is 14 per cent. It is not a law, a ruling by them. It is a standard promulgated by the United States Standardization Department of Agriculture; by law it becomes our standard, and that is the standard promulgated by that department, and we have a law that the butter fat must be butter fat, and shall be made of cream, and cited as a ruling given by the department. Because the government lost its case, there is no necessity for us to lose our case. It is not a Federal law; it is simply a ruling by one department of the Federal Government. There is no such thing as a Federal standard on anything in particular. The department has ruled, and then it must depend on its juries to convict, but with us, we have adopted the standard as law, and it is a question of law to be given to the jury. Because we have adopted it as our law, it is not a Federal law, but a Federal standard—that is, the 14 per cent standard—with such additions as come up from time to time. I know they have lost hundreds of cases. It is not a law, but it becomes our law, because we say they are rules and regulations establishing our law. Now, we insist that this homogenized stuff is not cream, it is not milk fat; hence, it is not to be used in our definition of ice cream.

Mr. McKinley of Illinois: How do you label it?

Dr. De Barr: We don't know how to label it—whether it is in the heavens or on earth. It isn't anything, in fact, that you can name. It is unnamable. It is not ice cream. Our ice cream manufacturers, if we have any homogenized fat in it, we will not take it as ice cream.

Mr. McKinley of Illinois: Dr. Rawl, the Federal requirement is 82.5 per cent butter fat; is the Federal department enforcing that standard?

Dr. Rawl of the District of Columbia: No.

Mr. McKinley of Illinois: Mr. Chairman, that is a proposition we are up against. We have adhered to the Federal standard of 82.5. Now our creameries are producing butter as low as 75 per cent. The moisture fat is recognized only by the Federal department. We have adopted that Federal law, and the Federal law has gone back on us and left us up in the air, and when I wired to Washington for that data, to see if they had dropped from 82.5, and they wired back, "Only on the moisture content." Now, I would like to ask if any of you have had a similar experience.

Dr. Rawl of the District of Columbia: The need of uniform action on that line is very apparent, but I do not undertake and do not propose to explain, because it is not in my province, and furthermore you all recognize as has been stated here that there exists no legal standards of a Federal character. It isn't a question whether they ought not to be, or anything of the kind. They have been held not to be legal standards.

Mr. Allen of Kentucky: Didn't the Supreme Court of Appeals in the Sixth District hold that the standard of the Secretary of Agriculture was a legal standard?

Dr. Rawl of the District of Columbia: It is a revenue standard as made now by the law. It is a revenue measure, and is a different standard to those other standards. They haven't the authority by law. It is unfortunate we have this one way, and another different in this matter, and it ought to be adjusted.

It seems to me in discussing this homogenine from one standard only, and that is in its use in combining butter with milk. Its use where the best cream, purchased sweet and clean, and homogenized and made into cream—I say that the wholesale contamination of homogenine is rotten, but it is unquestionably true that the use of homogenine with clean sweet cream is an advantage to the ice cream maker. I am sure that it enables him to make a product that is more satisfactory to the consumer. Now, let us not talk about the homogenizer as applied to that phase of the business. I do not think it is our business, if they choose to use that machine. Therefore, we should confine our consideration to the ques-

tion of what will lead to the legitimate use of the use of bad material recombined with milk, and thereafter made into a product we do not deal with.

About the labeling, as I said, I am unable to decide. The only way I know of to handle the proposition is through labeling.

Now, Mr. Allen, if you permit me to suggest, I doubt whether or not we have a right to say any person shall not use the homogenizer as a means of taking first class butter fat and recombining it with milk, and thereby produce a product that may be cheaper to the consumer. I do not know whether we have a right to say that that shall not be done. I recognize and I am with you in barring out the use of this renovated oil, and the use of bad fat, but when it comes to using a fat that is absolutely good, as good as the State of Wisconsin produces, and convert it into a product that is also good, I do not know that we have a right to discourage the purchasing of a product that the consumer can get for less money.

The discussion has drifted altogether. In connection with the use of the homogenizer as making possible the use of bad material; while on the other hand, don't you know some of the best ice cream factories in America are running every gallon of their cream through a homogenizer and we are getting better results? I do not say it does cheapen it, but you can produce better fat in a territory where lands and seed are cheaper, and you know you can produce butter fat cheaper 200 miles away from the city than in the city. The bulk of our butter fat is produced near the city, it ought not to be. We can produce cheaper farther away, but we have to pay the transportation of eighty per cent skimmed milk to get it there. If we can use the label, and force the maker to use in the first place perfect material, that is above reproach, butter fat which is above reproach, and in the second place, force him to put some label on it and specify what it is, I do not see how we can go farther under present conditions, and be fair to all parties concerned.

The Chairman: This is one of the most important questions before the convention. I want to disagree with Dr. Rawl. I say the practice is to take rancid, dirty butter, and mix the two together, and they are under unsanitary conditions purchasing a substance they call cream, and is it a cream, and can it be detected chemically? You mean to go into court on the stand and swear it is not cream, as cream is understood by the given acceptance of the term? Is it right we should go into hotels and have it put into our coffee, and is it right we should have it made into ice cream? Some may think it all right, but I venture the assertion it is all wrong, and I think we can spend no better hour than threshing it out with our chemists.

Mr. Russell of Oklahoma: Mr. Chairman, it is very important. I have a case pending in Oklahoma where an ice cream manufacturer is authorized to use this powder. We have adopted Rule 33, prohibiting the use of homogenized cream. Apparently, it is not cream when it is run through the machine as Mr. De Barr stated a while ago. When we adopted that rule, we called two meetings to break it up. Now they come back and ship carloads of this powder manufactured in the State of New York, and these men insist that they can use that in their ice cream. Now, we are holding that this powder, having been manufactured with a machine, is just the same form of a substitute as it would be if it was manufactured right in the plant from old stale butter. Am I right? Here is an ice cream manufacturer who can afford to pay \$3,000 or \$3,500 for a machine to make that substitute; here is another man who can't afford to invest in the machine. We say to that man who has that machine, you are permitted to make a substitute butter with that machine, but when the New York manufacturers come down with their carloads of powder, we assert it is illegal, even if it comes shipped into the state in a powdered form. Uncle Sam does not recognize it as a cream when it is made and shipped in that form, and there is nothing in Uncle Sam's laws that forbids powder being shipped into the state.

Dr. Rawl: If this material that you are speaking of that is shipped down there is not of such a quality as to permit its use for any purpose as a food, then it should not be used in ice cream.

Mr. Russell of Oklahoma: What is it?

Dr. Rawl: If you permit the use of that as a food in any form, then I see no reason for not putting it into ice cream if it is properly labeled—if the ice cream is sold for exactly what it is. If that material is not fit for human food, it should not be used in any form, and should not be permitted to be sold in any form, but simply because it is homogenized, if we are assuming that the homogenized material is bad, I expect that is pretty nearly right, but the fact that the homogenizer is used and I know it is used in good material, makes

me take the position I took. Therefore, if it is valuable for food for any purpose, and it is properly labeled, I do not see why it should not be sold. If it is not fit for food, it should not be allowed to be sold in any form, and if it is used in ice cream, then the ice cream should bear plainly what material it is made of.

The Chairman: The automobiles are out here, are we to go and continue this meeting until tomorrow?

(Whereupon at 4:15 p. m. the meeting was adjourned.)

THURSDAY, JULY 11, 1912.

2:00 p. m.

The Chairman: Gentlemen, you will please come to order.

The next paper to be presented is that of Mr. R. M. Allen's of Kentucky, "What Form of Procedure Is Most Efficient for Food Control Laws—the Criminal With or Without Summary Conviction or Civil Procedure?"

WHAT FORM OF PROCEDURE IS MOST EFFICIENT FOR FOOD CONTROL LAWS—THE CRIMINAL, WITH OR WITHOUT SUMMARY CONVICTION, OR CIVIL PROCEDURE.

By R. M. Allen.

At one of the Florida winter resorts is a native, it is told, who does not pretend to professional golf, but who has held the record on the local course against many of the best golfers from the best clubs of the country. The other golfers play with many clubs—a driver, a brassie, a cleik, a lofter, a mashie, a putter and so on. The Florida native plays with but one iron, which is fashioned, so it is said, like a heavy blunt blade, and straight like a putter. His drives are not as long as are the drives of his many opponents, but on the whole, with much truer aim. With one iron he lifts the ball over a bunker, or clump of trees, slices it with almost the exactness of a billiard player, drives it low, true, far, lifts it on the green and puts it into the cup with a total of fewer strokes than ever yet been equalled on that course.

It is surprising, when necessity compels, with what few tools and difficult means it is possible to accomplish desired results. When I was in London in 1903, the Irish linen makers and linen tradesmen had just succeeded in compelling a garment that is extensively sold in other countries as linen mesh to be labeled and sold as cotton and linen mesh. The result had been accomplished under an old English law which prohibits generally the adulteration of agricultural products without informing the purchaser. When the national pure food law was under final consideration in the Senate, Senator Bailey of Texas in making one of the able arguments against the measure, stated that if his state would confer upon him the power to prosecute all dealers in adulterated and misbranded food, he would, through rigid prosecution, bring full protection to the people in Texas, without the necessity of Federal assistance. From one standpoint he was right, especially with respect to such adulterations, misstatements and labeling as are recognized as being deleterious to health, or deceptive, and which are due to intent on the part of some of the trade to accomplish an unearned profit, even if the public health is harmed and the purchaser defrauded. Sometimes I wonder, as a food law executive, if our daily tasks could not be lightened and quicker results obtained by simply announcing to the trade that we will assume no responsibility, will not make prosecutions depend upon previous notices or warnings, but simply prosecute, swift and correct, any person whomsoever in whose hands an adulterated article of food or drug is found, intended for sale, and without inquiry as to whether that party knew of the adulteration or was responsible for it, and without inquiry as to whether or not the adulteration had been due to deterioration or unintentional contamination. And then, when a long experience floods my mind with the facts that carelessness, misguided but honest intent on the part of the trade, deficiencies in equipment and method in the manufacture and sale of foods and drugs which have obtained because of the fact that chemistry and bacteriology have not yet pointed out the proper rules, when I reflect how the inventor of the harmless substitute for milk, for egg albumen and other products believes that he has conferred a food benefit upon mankind, has the right to appropriate certain terms of nomenclature because of the fact that they have not belonged to any one in particular in the past, I see clearly two classes of food law violations: In one class, the dairyman who has deliberately watered or skimmed his

milk, or who produced it in a dairy far below the standard of ordinary cleanliness; the baker, whose every method is unsanitary; the druggist, who knowingly manufactures tinctures but half strength; the food manufacturer, who prepares his products out of unfit materials and without regard for the human stomach; and for such a class, the swift, blunt, single iron of speedy indictment and prosecution under the laws is, of course, the only remedy. But for the dairyman who has a fairly clean dairy, and yet a high bacterial count, with some pathogenic germs in his milk; the druggist, whose sweet spirit of nitre has become deteriorated, although not carelessly exposed, or whose asafetida, purchased for standard U. S. P. goods, is shown by analysis to be much mixed with sand; the fruit and vegetable manufacturer, who uses fresh pulp or fresh, ripe tomatoes, and whose catsup, nevertheless, shows a high bacteriological content; the manufacturer of a harmless food substitute, who honestly believes that he is entitled to the use of a particular ingredient, or a particular food term; the members of the retail and wholesale trade, who are buying and selling products in good faith under the guaranties of the manufacturers, require different treatment.

It is true, that our food laws, from necessity, have eliminated intent as an element of the offense; but I construe the hearing provision as contained, for example, in the Kentucky Act, as, first, for the purpose of checking any official mistakes, and, second, for the purpose of permitting us to inquire into just what person or condition is responsible for the adulteration and then directing the criminal arm of the law towards the person intentionally responsible, or the constructive means of the law towards eliminating the unsanitary condition. Frequently, a letter sent direct to the person or firm primarily responsible, and calling attention to a violation of the law, accomplishes quicker and greater results and with far less expense than would the taking up of samples among many retailers for the purpose of prosecution. Sometimes such a letter calls the attention of the outside manufacturer, residing in another state, to the fact that the department has the power to publish its findings, and thus give notice to the Kentucky trade that any further sales of a particular product will be reported for prosecution. In all such instances, however, the manufacturer primarily responsible is told that full opportunity will be given to have the courts pass upon any questions of fact and law involved.

The Federal Foods and Drugs Act provides for three methods of procedure: By criminal indictment, by civil proceeding to seize and confiscate the adulterated foods and the Secretary of Agriculture is given plenary power to shut out at the ports adulterated or misbranded products coming from other countries. The character of the food control work logically requires authority at law to proceed against the person responsible and against the adulterated and misbranded goods. It is plain, therefore, that a method for civil procedure under the laws, such as is contained in the libel provisions of the National law, should be written into each of the state laws and municipal ordinances. There are innumerable reasons for this conclusion, such as a can of contaminated milk, a side of spoiled beef, a tub of diseased oysters, a barrel of unsound fish, a case of deteriorated digitalis, in order that while justice is being done the trade, injustice or harm shall not be done to the consumer. Again, a proceeding in equity, such as would attend procedure against the adulterated goods, is a better means for presenting questions of fact and law before the courts. It enables both sides, by deposition, if necessary, to obtain a fuller record of the facts. Questions of evidence have broader limitations in equity than in criminal procedure, and, therefore, for the purpose of putting a quick stop to the further sale of a harmful product, or for the purpose of having disputed questions decided before the courts, civil procedure is in the one case necessary, and in the other to be preferred.

In most of the states, officials desire not only the consuming public, but the members of the retail and wholesale food and drug trade, to obtain as much protection as possible from the National law, and hold out to such trade that the purchase of interstate products with a properly signed guarantee against adulteration or misbranding will be accepted in the first instance as evidence of good faith. There are many in the trade who take advantage of this, however, and, in order that the deteriorated digitalis may not go to the surgeon, as the last means for saving life, in order that the freezer of stale ice cream, produced from unclean materials in an unclean factory located in another state, shall not go further with its tyrotoxic danger, in order that the consuming public may not be defrauded with respect to articles of every day consumption, the state and municipal authorities should have a means at law to hold up the product and

then let those who assert a property right, or a trade reputation interest, be given a chance either to remove it from commerce, relabel it or have the question as to what shall be done passed upon by the courts.

There are some legislative details which should properly be added to the seizure provision of the Federal Foods and Drugs Act and every state law amended to contain this method of procedure against adulterations. This detail, however, is not within the scope of this paper, but my answer to the question from the chairman of this section is that the food laws should provide for three methods of procedure: First, a criminal procedure; second, a means for proceeding against the adulterated or misbranded food or drug product; and third, full authority for the administrator to direct all the inspection and laboratory force at his command in a full investigation of all the facts, and in the working out of constructive recommendations whenever and wherever the varied fields of the food control work require.

Mr. Allen of Kentucky: I would add to this in closing another method of procedure, which, if incorporated in the national food and drugs act, would tend to bring about the point. We still have in this country, and it is not confined to the south, kind of a following of state's rights and not directed to the statutes, but the reason for that as it exists today. I think it is due to the fact that the state as a state has not as much opportunity to take these interstate questions to the Federal court, as have private individuals in litigation or as private individuals against the state commissioner, and the method I would recommend with respect to the national food and drugs act is this: Suppose it be amended so that when a food commissioner or attorney general of the state desires to proceed against an adulterated product, say with respect to this civil procedure or the seizure procedure, under the food and drugs act, so that any properly constituted state could get in, and when you open that door, it is the same law to all of us, all over the United States, and we would proceed under the national law with respect to interstate matters fairly, and that emphasizes in my mind with the little experience in Washington I have had with respect to railroad matters and other matters of that kind, with which we are not concerned, that sometime we can get methods of procedure whereby the state authorities would look into our jurisprudence, where we are hindered in getting our matters into court, the same as a man or private individual setting forth a certain fixed sum of money. I would recommend this in connection with the other three that have already been given.

The Chairman: Nineteen minutes of thirty minutes have gone. I am sorry it was not limited to ten minutes to read it. I am going to ask Dr. Ladd to open this with a three minutes' talk.

Mr. Ladd of North Dakota: I was not here to hear the first part of the paper, but I might say that it is my experience that the civil procedure is not very satisfactory, so that all my work is done under the criminal act. Civil proceedings are too slow for us in the first place; that is, it may run for six months, a year, or two years. I assume in a great way, like New York, or Pennsylvania, the cases may hang on for years.

The Chairman: Ten years sometimes.

Mr. Ladd of North Dakota: It may be, with us, two or three years. We have in North Dakota a procedure clause, and we could not proceed without an order of the court. Justices of the peace cannot make up cases properly to get before the court and on technicalities, they would be ruled out. Violators do not come in under the food and drug law. The sanitary laws are somewhat different, and it seems to me that it is the only way we can proceed, by seizing the goods. We can seize the goods, and go before the court and ask for an order. I have only had occasion to exercise the right on two occasions, but both were sustained.

The Chairman: Who will be next?

Mr. Allen of Kentucky: Commissioner Ladd, I think we are both together on that. Seizure means the same thing, if it took ten years to dispose of that seizure of bad goods. The goods are out of the way of harming the public, and if the interests on the other side wish to drag out for ten years, I cannot see any objections from that standpoint. If they wanted to have them go for ten years, you would be keeping the goods from the public.

Mr. Emery of Wisconsin: If I have these goods on my hands, and the court turns me down, what is the remedy?

Mr. Allen of Kentucky: That would end the case.

Mr. Russell of Oklahoma: When a drug is below stand-

(Continued on Page 79.)

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"SMALL QUANTITIES."

Some time ago, our old friend Dr. Wiley fell all over himself in his efforts to bluff the American public into the belief that he did not sign an order in a certain case where lead had been found in cream of tartar baking powder, placing the case in permanent abeyance because the lead was not poisonous when it appeared in small quantities in cream of tartar. Dr. Wiley at that moment was trying to live up to the standards he had established for himself in his well-known literary production, entitled "Foods and Their Adulterations." In that work, under the heading of "The Arguments of Small Quantities," he wrote as follows:

The fallacy of the argument for small quantities is so evident that it needs only to be presented in brief form to show the intelligent and thinking people of this country the fallacy of the claims of experts in favor of chemical preservatives. This argument has been urged with such vigor and such ingenuity that a further reference may not be out of place here. The principle laid down is that a substance which is injurious to health when it is added to foods, if not a natural constituent thereof, or if not added for condimental purposes, does not lose its power of injury to health because it is diluted or given in small quantities. It is easy to show by mathematical data that no matter how small the quantity of an injurious substance or preservative it will still produce an injurious effect which may be infinitely small if the dose be infinitely small. That these minute quantities would not be injurious insofar as producing any fatal effect is concerned is conceded, but that in the end they do not produce an injury even in these small quantities is certainly to be denied.

Now Dr. Wiley, having "retired" from the Bureau of Chemistry, is no longer so particular about his reputation, or possibly he wants to apologize to those who have always laughed at his arguments on *de minimus*, or possibly he wants to placate the AMERICAN FOOD JOURNAL and induce us to suggest his return to the position of chief of the Bureau of Chemistry. At all events he is now taking a position diametrically opposite to the position he assumed some months ago, and the argument in his well-known work, a fact which came up in the trial of a case between two salt companies, one of which claimed that the

other was infringing in its trade-mark, and the other of which claimed that the prosecutor was no better than he should be. Dr. Wiley was an expert witness for one of the parties. The issue between these companies has little significance beside the startling facts in regard to the mental somersault of Dr. Wiley, brought out in his testimony. One of the lawyers for the defendant (or the complainant, it doesn't matter which) asked Dr. Wiley if he knew of any table salt ever placed on the market in which the percentage of gypsum in it made it poisonous.

"No," replied Dr. Wiley. "I do not consider gypsum a poison in the sense that arsenic and strychnine are poisons. Gypsum is slightly soluble in pure water when one part of gypsum is mixed with 500 parts of pure water at a temperature of 45 degrees, this temperature being that of the maximum solubility."

Dr. Wiley went on to explain that gypsum taken in large quantities might be deleterious, just as sodium chloride and other constituents of common salts would be. But that, he said, applied to beefsteak as well. When asked whether gypsum could be expelled from the system he said:

"Yes, I think so, else we should all become pillars of salt."

"Gypsum does not tend to induce any immediate disease," he went on, "but on the other hand, it is a substance which the body cannot assimilate quickly, and the body should be spared the expenditure of energy necessary to rid itself of foreign substances. Gypsum is nevertheless a soluble body and recognized as such by chemists."

The attorney then read to the witness extracts from advertisements of one of the parties stating that ordinary salts are "highly poisonous," that "gypsum causes serious sickness," that gypsum "lines the stomach with hard plaster" and that diseases of the kidneys, liver and spleen were induced by the gypsum in salts. Dr. Wiley expressed the opinion that these statements were "untrue" and "misleading." He said that all salts contained some gypsum and that he did not believe they were poisonous.

We trust that Dr. Wiley has not forgotten some of the things he said in the past. We are confident that this is not so. Dr. Wiley is really getting better. He is improving. The Bureau of Chemistry narrowed his horizon as well as bound him down in other respects when he tried to qualify as an "expert." Now he is quite at home on the stand, full of confidence, clear-headed, and presumably bright-eyed. We can almost see him waving his arms as he denounces the argument that a small quantity of a deleterious ingredient in foods is harmful. Again, the ex-protector of ninety million American stomachs may see some logic in protecting his own stomach, likewise his back and his roof-tree.

The money gained from expert testimony is very sweet. It goes a long way, because expertness in the class with which Dr. Wiley now qualifies claims quite a considerable *per diem*—*per diem* in this case meaning long green, and the right kind of an expert can judiciously augment the *per diem* and the frequency of its recurrence by giving the right kind of testimony.

When Dr. Wiley left the Bureau of Chemistry and gazed out upon the large world, his eyes became open to many things.

WHISTLING IN THE DARK.

Barrels and Bottles is determined to keep up its courage. It refuses to weaken on the proposition that the National Consumers' League is a genuine, *bona fide* organization. There is much at stake. For years the insiders of this organization have been using what prestige it could gather through its high-sounding name and its list of "advisory board" members in an effort to discredit the Secretary of Agriculture and exalt his opponents. These opponents, many of them, are influential. They have money; they own newspaper organs; they control such organizations as the National Consumers' League. There is a plain interrelation. To admit that one link in the chain is a spurious organization is to destroy the whole conspiracy. The newspapers controlled by the opponents of Secretary Wilson print the resolutions passed by this spurious and fraudulent league and adopt an editorial attitude toward it that misleads their readers and other readers not so well informed into the belief that the league is a genuine organization with an actual standing in the community. Similarly, it is necessary to employ press agent work for Dr. Wiley. Dr. Wiley praises the Consumers' League; the newspapers in the ring laud both; then a little mutual admiration gush is given out by the league in behalf of the newspapers, the public looking on, some applauding, but nearly all believing, and underneath all the impression gaining ground that there is something wrong in the Department of Agriculture. For example, under the heading, "Wilson on Carpet in Land Fraud," appears a ten-line telegram stating that a Congressional committee questioned the Secretary of Agriculture and learned that he had no knowledge of or connection with the particular fraud he was sought to be connected with.

But the Consumers' League, the newspapers, the magazines, the individuals concerned in the conspiracy go scatheless. Their iniquities are not yet found out. They will be, however, and no matter how often the names of the "advisory board" are printed, the facts that the Consumers' League is not a genuine organization, that it does not represent any consumers, and that its principal function is to villify the Secretary of Agriculture, will come to public knowledge sooner or later.

In the meantime a fact or two we brought to public attention some time ago in regard to the National Consumers' League we think worth reiterating. At the time of an investigation of the league made by this journal, letters were written to the persons whose names appeared in the "advisory board" asking them what responsibility they accepted for the acts of the league and what their actual duties were. The replies that were received indicated that there was a haziness in regard to their connection with the league in the minds of most members of the "advisory board"; they had been asked to act, some said; others, who happened to be state chemists, were asked to act as detectives and report suspicious foods. One state chemist was highly indignant because his name appeared in connection with some transactions of the league that did not suit him, and he wrote that he had repeatedly asked to have his name removed from the stationery of the league, without success. All of the replies indicated that the "advisory board" was never called into consultation when any important action, like the passing of resolutions condemning the Secretary of Agriculture, was in contemplation. But most of them indicated that they were little disturbed by what was done apparently with their full knowledge

and sanction. It is evident that the league tried to select only such persons as could be depended upon to be complaisant and who at the same time occupied positions of a character to give them some importance in the eyes of the average person. This system is plain evidence of bad faith. An "advisory board" that has nothing to do with the transactions of the organization it apparently advises, and whose membership is published only because they have a sort of prominence, is not an advisory board. To print such names under such a designation is to mislead and deceive. The editor of *Barrels and Bottles* can scarcely fail to understand this, and we must conclude when he prints the names of this advisory board, as he did in his last issue, it is as much for the purpose of misleading and deceiving his readers who do not know the facts as for the purpose of keeping up his own courage. For *Barrels and Bottles* is a part of the conspiracy. It is one of the privately own publications that boosts Dr. Wiley and the National Consumers' League and villifies the Department of Agriculture. The AMERICAN FOOD JOURNAL is quite ready and willing to give it the benefit of all its information on the subject of the National Consumers' League.

A DASH OF COLOR.

The dry proceedings of a grave deliberative body require at times a little levity and an occasional dash of color. This was furnished in the recent convention of food and drug officials at Seattle by Dr. Cook of South Dakota and Professor Fulmer of Washington. To give this high light in a rather gray picture a little more relief, we will call to the witness stand Prof. Floyd Robison of Michigan and ask him to repeat the story of the unfortunate litter of kittens and tell how their beautiful young lives were snuffed out by the untimely administration of various doses of benzoate of soda. Let us not prolong the agony lest the little children in the front seat weep too copiously. Let us reflect that this was all done in the interest of science, and that with all its interest, Professor Robison lost his job and is now back in private life, and so far as we know is making more money than he could ever squeeze out of a state or national job. Now that the underbrush is cleared away, we will proceed with the narrative:

Dr. Cook had delivered a paper before Section C on "Relative Toxicity of Substances Found in Foods," and the discussion was going merrily forward. Dr. Cook is speaking, and we quote directly from the proceedings:

There is one thing I have forgotten to say. These experiments, except in the case of frogs and fishes, are not very extensive, but we started out to experiment on cats, but finally had to give it up because of certain conditions. We found out that these full-grown cats thrive on sodium benzoate and alum, fed to them in milk, of course, and that is contrary to other experiments reported. In the case of frogs, however, they died after a while. I don't remember just how long. They died after a few weeks with symptoms very similar to strychnine. It seemed very wonderful to us. We even wondered whether it was not possible that they got hold of some strychnine by mistake.

Prof. Elton Fulmer of Washington: In regard to the last remark of the speaker that different animals present different characteristics, I remember a few years ago, it became my duty to investigate the poison parsnip, which grew in western Washington quite extensively, and I extracted considerable oil from the parsnip. While doing so a mouse was injudicious enough to run across the floor of my laboratory, and I caught the little fellow and took the sharp point of a toothpick and dipped it in the oil and rubbed it over the jaws of the mouse, and fifteen minutes later he was dead. The next day I took

a cat and fed it in large doses, and it simply called for more. When we get such astonishing results among the lower animals it is quite safe to say that we are not able to reach conclusions as to effects upon human beings from the effects on animals.

Of course there was no question originally that the pathology of the lower animals differs from that of human beings, and the fact that the cats were crazy for benzoate and alum and poisoned parsnip does not prove that these substances are beneficial or deleterious when consumed by human beings. But we hope all our scientific friends will remember this incident when are are asked to prove deleteriousness in anything by injecting it into a rat or a guinea pig or a cat. Perhaps the gentlemen who engaged in the discussion did not realize how funny they were and how much they were contributing to science, either. At this distance there is a large measure of amusement in contemplating the discomfiture of these gentlemen when they found out that the cats like the presumptive poisons and they had to give up their experiments because of "certain conditions."

A MISBRANDED "BUREAU."

A more or less flagrant case of misbranding has been brought to our attention. It is a case that does not contravene the food law, or any other law, for that matter. For that reason it is of a most dangerous character. Not violating a law, the observer, who may perceive, or not, that it is a deceptive and misleading label, must say to himself, if his moral perception is not educated along these lines, "That must be all right."

There is another insidious feature of this misleading and misbranded thing. It is sponsored by and done in the interest of one of the greatest authorities on misbranding (of foods, at least) in the country—none other than the great and good Wiley. So that his followers, of whom there remain a good many in this country (in spite of a rude awakening in some quarters), will conclude, even if they have educated moral perceptions, that it is all right anyway.

We refer to the so-called "Bureau of Food, Sanitation and Health, 1200 Woodward Building, Washington, D. C.," established by *Good Housekeeping Magazine*, a worthy enough magazine as magazines go, but ready enough to reap rewards and gain publicity wherever it can. Dr. Wiley is "Director" of this bureau. He was formerly chief, a title somewhat similar to director, of a Bureau of Chemistry in Washington, D. C., a bureau that was part of an important department of the Government and having therefore an official standing. That Dr. Wiley's new occupation should be that of "director" of a "bureau" may be merely a coincidence, but it smacks too much of deliberate deception to suit us, and therefore we designate it as a case of deceptive misbranding, designed to mislead the reader into the belief that Dr. Wiley still occupies an official position in Washington. The selection of Washington as a location for this "Bureau of Food, Sanitation and Health" is part of a transparent plan to mislead. The bureau could just as well have been attached to the editorial office of which it is a part, in New York. It is not a bureau in the true sense of the word. Webster gives one definition of the word "bureau" as "A department or office of Government for the transaction of public business, or a subdivision of such a department or office." This is just exactly what the *Good Housekeeping Magazine's* bureau is not. It is merely a department of its

editorial office, and to designate it as a Bureau of Food, Sanitation and Health is to misrepresent and mislead people into thinking it is some department of the Government. This is what Dr. Wiley would like to have people think. He is aware how short a time the news of the day lasts, and he doubtless hopes that to be heralded as "director" of a "Bureau of Food, Sanitation and Health," even if it be only an adjunct of a magazine, is to endow him with much importance in the public eye and to induce many people to believe that he never lost his job as chief of the Bureau of Chemistry at all. The misleading character of the designation of Dr. Wiley's headquarters in Washington should call for some kind of official action.

A LESSON OF THE CONVENTION.

Far be it from us to attribute bad faith to the gentlemen who have lost the final battle for control of the food control officials' national organization. We prefer to look upon them as "last ditchers." A man may give his word not to do a thing and then come up with an effort to do the thing he promised not to do, merely because he saw a fighting chance to get away with it, and be subject to no more approbrious classification than that of opportunist. But these tactics savor of guerilla warfare, and some of the gentlemen who were put to the final necessity of stamping out the faction, undesirable or desirable, that sought to control, fought for control, and were defeated and paroled on their honor not to do certain things, were a little bit pained to see the parole broken and effort made to get a fresh and insidious grip on the official organization by trying to elect Mr. Chemist Barnard of Indiana chairman of the Executive Committee. Mr. Barnard was an open and avowed candidate for the office of President of the American Association of Food, Dairy and Drug Officials when he went to the Seattle convention. After much caucussing and log-rolling he found out that the honor was not to be his. His "henchmen," of which Mr. Allen of Kentucky was chief, agreed to a program which gave to Dr. Cutler of Missouri the chairmanship of the Executive Committee. There may be some denials of this pact, so we will mention that when the argument came up on the floor of the convention, whether there was a pact or not, it was carried out. The chairmanship of the Executive Committee was the only office for which there were two nominations. It will be observed from a perusal of the official proceedings that Mr. Barnard lost, and also that Mr. Allen was the proponent of his name.

Correlatively, a resolution lauding Dr. Wiley was voted down after a short debate. The Wiley cohorts and the Barnard henchmen comprise the same individuals. Their aims and objects are the same; their politics are identical; their methods are like. The same courage—or the same lack of good faith, as you will—characterizes them. The scotching of these unwholesome ambitions may be the duty of another convention, unless these gentlemen have learned a lesson this time.

Full many a man, both young and old,
Has gone to his sarcophagus
By pouring water, icy cold,
Adown his hot esophagus.

—The Percolator.

WHAT HE WAS.

"I saw a magician turn water into milk last night."
"He's no magician, he's a milkman."—Houston Post.

United States Department of Agriculture

OFFICE OF THE SECRETARY.
BOARD OF FOOD AND DRUG INSPECTION.

Food Inspection Decision 145.

BLEACHED OATS AND BARLEY.

The Department of Agriculture has received numerous inquiries relative to the application of the Food and Drugs Act to oats, barley and other grains bleached with the fumes of sulphur. It appears that by this process grains which are damaged or of inferior quality may be made to resemble those of higher grade or quality, and their weight increased by addition of water. Such products, therefore, are adulterated within the meaning of the Food and Drugs Act of June 30, 1906, and can not be either manufactured or sold in the District of Columbia, or in the Territories, or transported or sold in interstate commerce.

It is represented, however, that grains which are weather-stained, or soil-stained, the quality of which is in no wise injured in other respects, are sometimes bleached with sulphur fumes. Pending the report of the Referee Board of Consulting Scientific Experts as to the effect upon health of sulphur dioxide, and the results of experiments being made by this department as to the effect of sulphur-bleached grains on animals, no objection will be made to traffic in sound and wholesome grains which have been bleached with sulphur dioxide and from which the excess water has been removed, provided that each and every package is plainly labeled to show that the contents have been treated with sulphur dioxide. Bulk shipments should be properly designated on invoices. The terms "purified," "purified with sulphur," "processed," etc., are misleading and not proper designations for these products.

Attention is also called to the fact that grains bleached with sulphur fumes may have their germinating properties very seriously impaired.

R. E. DOOLITTLE,
F. L. DUNLAP,
A. S. MITCHELL,

Approved: Board of Food and Drug Inspection.
JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., June 24, 1912.

Food Inspection Decision 146.

ON THE USE OF SACCHARIN IN FOODS.

There appears to exist a misconception of the position of the Department of Agriculture as to the use of saccharin in foods as announced in Food Inspection Decision No. 142. That decision prohibits the use of saccharin in foods. The law defines the term "drug" and it is considered that saccharin has its proper place in products coming within this definition.

It is recognized that certain specific products generally classified as foods, and sweetened with saccharin, may be required for the mitigation or cure of disease. It is not intended to prohibit the manufacture or sale of such products, provided they are labeled so as to show their true purpose and the presence of saccharin is plainly declared upon the principal label. This must not be interpreted to mean that the use of saccharin in foods prepared for ordinary consumption is permissible even if declared on the label.

R. E. DOOLITTLE,
F. L. DUNLAP,
A. S. MITCHELL,

Approved: Board of Food and Drug Inspection.
JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., June 22, 1912.

Food Inspection Decision No. —.

ABSINTHE.

It is generally recognized in countries which have had experience with the sale and consumption of absinthe that this beverage is dangerous to health. Belgium, Switzerland and Holland have forbidden its manufacture, sale and importation; absinthe is also condemned by the laws of Brazil and its importation forbidden.

The Food and Drugs Act of June 30, 1906, Section 11, forbids the importation of any food or drug which is "of a

kind forbidden entry into, or forbidden to be sold or restricted in sale in the country in which it is made, or from which it is exported," and also of any food or drug which is "otherwise dangerous to the health of the people of the United States."

Importations of absinthe into the United States, therefore, are prohibited, both because they come from countries which forbid or restrict its manufacture and sale, and because these products are injurious to the health of the people of the United States.

Section 7, Paragraph 5, in the case of foods, of the Food and Drugs Act, June 30, 1906, provides further that an article shall be deemed to be adulterated within the meaning of the act "if it contains any added poisonous or other added deleterious ingredient which may render such article injurious to health." The beverage commonly known as absinthe is a manufactured product containing wormwood, or absinth (*Artemisia Absinthium*, an added deleterious ingredient. The interstate shipment of this product is, therefore, prohibited under this provision of the Food and Drugs Act.

The Secretary of Agriculture, therefore, will regard as adulterated under the Food and Drugs Act absinthe which, on and after October 1, 1912, is manufactured or offered for sale in the District of Columbia or the Territories, or shipped in interstate commerce or offered for importation into the United States.

R. E. DOOLITTLE,
F. L. DUNLAP,
A. S. MITCHELL,

Approved: Board of Food and Drug Inspection.
JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., July, 1912.

ENFORCING THE PROVISIONS OF THE FOOD AND DRUGS ACT.

In the months of April, May and June, 1912, more than five hundred cases under the Federal food and drugs act were reported to the Attorney General for prosecution by the Department of Agriculture, including both criminal prosecutions and recommendations for the seizure of adulterated and misbranded foods and drugs. This number is one-eighth of the total number of cases reported for prosecution since the act became effective on January 1, 1907, is double the number reported by the secretary to the Attorney General during April, May and June, 1911, and exceeds by more than 25 per cent the number of cases reported during the first quarter of 1912. The number of cases reported was so large that it has been found necessary for the United States attorneys in some of the large judicial districts to make up special calendars of food and drug cases and set aside several weeks exclusively for the trial of such cases.

Secretary Wilson commends many of the United States attorneys for their diligence in prosecuting the cases. The maximum penalty allowed for first offenses, that is, a \$200 fine, has been imposed on several defendants. The first jail sentences under this statute were imposed during this quarter. Several hundred consignments of food stuffs found to contain filthy, decomposed or putrid material have been condemned and destroyed after seizure. Noteworthy among cases of this class was the proceedings for the condemnation of about 2,000 cases of sardines found on examination by the Bureau of Chemistry to consist wholly or in part of filthy, decomposed and putrid substances. In this case, after a warmly contested trial, the jury returned a verdict for the Government. In a considerable number of seizures, where the offense charged was misbranding only, and the goods contained no substances which were injurious to health or which were filthy or decomposed, the consignments have been released to the owners after relabeling, on the payment of costs and the filing of bond that the goods will not be disposed of contrary to law.

During the same period several thousand samples of foods and drugs offered for import into the United States were, upon examination by the port laboratories of the Department of Agriculture, found to be adulterated or misbranded. The results of the examination of these samples were communicated promptly to the Secretary of the Treasury with the request that the consignments be detained with a view to proper labeling in the misbranding cases and the return to the country from which exported of foods and drugs found to be injurious or to contain filth. The number of samples examined by the port laboratories during the quarter ending June 30, 1912, as well as the number of samples found by the port laboratories to be adulterated and misbranded, is far in excess of the number for the same period during the fiscal year 1911.

The Law and the Food Manufacturer

Florida Food Law Regulations.

The following notice has been sent out from Tallahassee, Florida, by R. E. Rose, State Chemist, and W. A. McRae, Commissioner of Agriculture:

The provisions of the pure food and drugs law, chapter 6122, approved June 5, 1911, became effective August 3, 1911.

Numerous letters of inquiry having been received from manufacturers, jobbers and dealers in packing goods in the State of Florida, and also from other states, asking an extension of the time allowed to make the necessary changes in labels on goods now on hand, and disposition of such goods now legally in the state, or contracted for for future delivery to the wholesaler, jobber or retailer prior to August 3, 1911, that do not comply with the amended pure food and drugs law.

A conference was held at the office of Commissioner of Agriculture in Tallahassee, Florida, June 18, 1912, at which time the various commercial organizations—wholesale grocers' associations of Tampa, Jacksonville and elsewhere; retailers, brokers, manufacturers and representative wholesale and retail merchants from other points in the state—were represented.

After due consideration, discussion, and statement of facts, the consensus of opinion was that the law was both reasonable and just—fair to the manufacturer, dealer and consumer; and necessary for the protection of the legitimate manufacturer and dealer in honest goods, and the consumer from the unfair competition of "light-weight, short measure," or diluted and adulterated foods and drugs.

That its provisions should be enforced at the earliest possible time consistent with the protection of the legitimate business of the state, and the protection of those manufacturers, dealers, brokers, wholesale and retail merchants who have now on hand, legally, under the state and national laws, stocks of package goods, and contracts for fall delivery of canned goods—the pack of 1911. After due consideration of all the facts, and the interests of all parties concerned—the manufacturer, the dealer and the consumer—the following ruling has been adopted:

First. The net weight or measure shall be "conspicuously, legibly and correctly" stated on the outside of all packages of grain, flour, meal, butter, lard, cottolene (or similar compound), cooking oils, syrups, and similar staple groceries; that printed "stickers" will be allowed on such goods on hand, to which they are applicable, which will protect the same till sold.

Second. That stocks of canned goods, vegetables, pickles, baking powders, jellies, preserves, etc., in cans, bottles or cartons, on hand August 3, 1911, or contracted for fall delivery, if in full compliance with the state and Federal laws and regulations, prior to August 3, 1911, may be disposed of till February 1, 1913. That printed "stickers," showing the "net weight or measure" of such goods, shall be applied before February 1, 1913, and shall protect such goods actually delivered in the state or bona fide contracted for, for future, delivery, prior to August 3, 1911, until sold.

This ruling shall apply only to such goods as were legally on hand August 3, 1911, at which time the law went into effect, and to those contracts as were entered into prior to August 3, 1911, for future delivery to wholesaler, jobber and retail merchant, and shall not apply to any goods purchased or contracted for subsequently to the date the law went into effect, August 3, 1911. All the goods purchased subsequent to August 3, 1911, or contracted for, shall fully comply with the pure food and drugs law of 1911, in every respect.

Note—Net weight shall be stated in pounds or ounces avoirdupois or fractions thereof. The unit being the pound, all packages containing one or more pounds shall state the weight in pounds. Weights less than a pound shall be stated in ounces—i. e., "1 lb. net," "2 lbs. net," "50 lbs. net," or "2 lbs. 2 oz. net," "8 lbs. 4 oz. net," "47 lbs. 6 oz. net," "4½ oz. net."

Net measure shall be stated in United States standard gallons, or in quarts, or fluid ounces (a fluid ounce being one-thirty-second of a quart by measure)—i. e., "1 gal. net," "1 qt. net," "30 fl. oz. net," "7 fl. oz. net," or "3 qts. 8 fl. lbs. 6 oz. net," "4½ oz. net."

To express one pound or more in ounces, or one quart or more in fluid ounces, will not be permissible.

Third. That goods actually on hand August 3, 1911, containing not more than 1-10 of 1 per cent. benzoate of soda, and otherwise complying with the state and Federal laws, prior to August 3, 1911, may be disposed of till February 1, 1913. That bona fide contracts for such goods existing before August 3, 1911, will be respected, and the material allowed to be sold till February 1, 1913, after which date no goods containing benzoate of soda can be legally sold in the state.

Fourth. Goods actually on hand in the possession of the trade within the state August 3, 1911, may be disposed of, provided the same are plainly labeled "sweetened with saccharin," as now provided by law. The manufacture or importation of any food containing saccharin after August 3, 1911, is not permissible legally in the state.

Fifth. No "drug sold under or by a name recognized in the United States Pharmacopœia or National Formulary, that differs from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopœia or National Formulary" can be legally manufactured or imported into the state after August 3, 1911. Such stocks of dilute standard drugs that may be actually on hand in the state August 3, 1911, in the hands of dealers, may be sold till January 1, 1912, provided they comply fully with the state and Federal laws and regulations in force prior to August 3, 1911. After January 1, 1912, dilute standard drugs cannot be legally sold in Florida.

Sixth. All manufacturers and dealers complying with the letter and spirit of the foregoing rules will be exempt from prosecution for misbranding or adulteration. Evasion of this regulation will be considered a breach of faith, and the goods subject to seizure, sale or destruction, as provided by law and regulations.

Seventh. It is recommended that the labels of all packages of food received after August 3, 1911, have the necessary "stickers" applied to show "net weight or measure," that they may be in shape to protect such goods till sold. The application of "stickers" after February 1, 1913, will not be legally permissible. All packages of food not having the net weight or measure of the contents thereof plainly stated on the label by "sticker," as provided, or printed on the label, after February 1, 1913, will be considered in violation of the "pure food and drugs law" and subject to condemnation as the law directs.

Approved June 20, 1912.

The Mocha Coffee Case.

The case of the Thompson & Taylor Spice Company, prosecuted in the United States District Court for the Northern District of Illinois for violation of the Federal food and drugs act in misbranding certain coffee "Mocha and Java," was decided on June 17th by Judge Landis, who found the defendant guilty and imposed a fine of one dollar, the offense being technical only.

The complete text of Judge Landis' decision is as follows: "I made a memorandum of the disposition of this case, contrary to my usual custom, because of what the parties seemed to have in mind as to the importance of the question to people engaged in the coffee business.

"In this case the defendant company is charged with a violation of the misbranding section of the pure food law, in that there has been the use of the geographical name 'Mocha' in connection with the sale of coffee grown in Abyssinia. Against the defendant, it is urged that the word 'Mocha' can lawfully be used only to designate coffee grown in Arabia.

"The facts are that on one side of the Red Sea is Arabia; on the other side is Abyssinia. Coffee is, and for centuries has been, grown in both of these countries. Up to about 200 years ago practically all of the Arabian product and a portion of the Abyssinian product was shipped out through the port of Mocha, located on the Arabian side of the Red Sea. Because of this fact this coffee was called 'Mocha.' At that time, owing to the formation of a sandbar obstructing the entrance to the harbor of Mocha, the port ceased to be the point of shipment for that coffee product, and since that time it has come out mainly through the port of Aden, in Arabia. This is the case now, with respect to both Arabian and Abyssinian products, as it was up to 200 years ago with respect to both products at the port of Mocha.

"The pure food regulation, adopted under the authority conferred by the National pure food law, is as follows:

"The use of a geographical name in connection with a food or drug product will not be deemed a misbranding when, by reason of long usage, it has come to represent a generic term and is used to indicate a style, type or brand, but in such cases the state or territory where any such article is manufactured or produced shall be stated on the principal label."

"As above observed, Mocha is not a place where the coffee is manufactured or produced. It is merely the port through which originally the coffee referred to found its way to market. This being true, the above regulation plainly requires the use of the word 'Abyssinian' in connection with the word 'Mocha' to cover coffee grown in Abyssinia, as the same law plainly requires the use of the word 'Arabia' in connection with 'Mocha' to cover coffee grown in Arabia."

"In view of the fact that it was agreed on all sides that this case was brought as a test case to determine this question, the minimum penalty of one dollar will be imposed."

The costs in the case, which would have included the mileage of a large number of witnesses from New York and other cities, would have amounted to a large sum, and if these costs had been taxed against the defendant it would have carried with it an implication of guilt which the decision distinctly absolves them from.

The whole point of the decision, it will be observed, is that the court sustains the contention of the defendant as against the Government that Abyssinian coffee is as much entitled to the designation of Mocha as is the Arabian, but holds that it would be a violation of the misbranding section of the food and drugs act to label either the Abyssinian or Arabian coffee merely as "Mocha" without at the same time stating whether or not it was "Abyssinian Mocha" or "Arabian Mocha."

An English Decision on Sardines.

The long-contested question, "What is a sardine?"—one of much international interest—has recently come to the front again in connection with a test case decided in the city of London. A wholesale grocery firm at Newcastle-on-Tyne was charged under the merchandise marks act in the city of London Magistrates' Court, at which mercantile cases of this sort are customarily brought, with selling Norwegian "brisling" or "sprats" under the name of sardines.

The prosecution was undertaken by a trade body on the ground that the use of the name sardine was in this case a false trade description. After an exhaustive inquiry the magistrate held that the word "sardine" had become anglicized and that the meaning of the term was the "immature pilchard prepared and packed in oil in tins." As it appeared that the defendant had acted innocently, and that the Norwegian Government had formally adopted the word "sardines" to describe the brisling packed in oil, the summons against him was dismissed.

The decision, however, confirmed the contention of the French sardine canners of Nantes and Brittany coast, off which these immature pilchards are caught, that this fish is alone entitled technically and commercially to the use of the term "sardine."

The Association of the Manufacturers of Preserved Sardines of Nantes accordingly have issued a warning and notified the trade and all others concerned in England that proceeding will be taken against any person "who shall in future offend against the provisions of the merchandise marks act by applying the false trade description 'sardine' to any fish other than the young or immature pilchard, which has now been established as the only true and genuine sardine."

The court held:

1. That the term "sardine" means the immature or not fully grown pilchard prepared and packed in oil in tins.
2. That what the defendant had sold was not the immature pilchard, but the Norwegian brisling or sprat.
3. That to describe the Norwegian brisling or any sprat packed in oil in tins as a "sardine" amounted to applying a false trade description within the merchandise marks act.
4. That the term "sardine" was not a general expression which could be lawfully applicable to any other fish or parts of fish prepared and packed in oil in tins, but was lawfully applicable to the young pilchard only.

The French Sardine Canners' Association in their statement say that the question involved in the proceedings was whether the time had not come to put an end to the packing of all kinds of fish or parts of fish in tins labeled to make persons believe they are "sardines."

"French packers," they say, "have always considered that only the fish designated in French as 'sardines,' the 'clupea pilchardus,' could be sold as sardines, and whenever unscrupulous packers tried to increase their profits by selling as sardines some less valuable fish, such as sprats, under fictitious brands (thus proving they knew they were doing wrong), prosecutions were started against them by those interested in the French packing trade, and in all cases they have been condemned."

"Proceedings were taken as long ago as 1879, and have been continued to the present time, and in some cases the condemnation of defendants has been confirmed by the courts of appeal of Paris and Rennes. All those prosecutions were always made under the French common law, which punishes misdescription of goods sold."

A Curious Misbranding Case.

The notice of judgment in a pure food law case just published contains two points in which millers will be interested. The case was tried in the Federal District Court of South Carolina. It involved some cornmeal which was branded as "choice water ground" and the name "Hazel Green Mills" was added. There was no allegation reflecting on the character of the goods, its weight, or anything except the brand. The suit was brought at the instance of the Secretary of Agriculture, because, first, the meal was made in an establishment propelled by electricity, and second, because the original Hazel Green Mill was dismantled some time ago.

The court charged the jury that if a man pays for an article and stipulates that it be prepared in a certain way, "water ground" cornmeal, for instance, he has a right to have what he pays for, even if it is a mere fancy on his part. It makes no difference, even, if he wants to pay a higher price for an inferior article; he has a right to do so. Quality cuts no figure. If a brand says the meal is "water ground," it must be true to name. A man's whim, in the opinion of the court, is his own affair, and people who appeal to the whim must go further than the brand and indulge the whim in good faith. The jury found that the meal was not "water ground," even though the electricity was produced by water power.

The court charged as to the name "Hazel Green Mills," that it was a question for the jury to decide whether it was a brand or a designation of the location of manufacture. The court said: "Brands may consist of all sorts of fancy names and a person may acquire a brand from manufacturing at one spot and move his factory and carry his brand with him." Likewise the brand could be sold, if the name "Hazel Green" were a brand and not merely a location.

Louisiana Food Law Sustained.

The Supreme Court of Louisiana has refused a rehearing in the case of State of Louisiana vs. Harry H. Snyder, which was the test of the constitutionality and legality of the pure food and drugs law and of the sanitary code as formulated and promulgated by the Board of Health of Louisiana under the mandate of the Constitution and the Legislature. The case of State vs. Snyder was prosecuted throughout exclusively by the State Board of Health and is a vindication of the position which the board has assumed, not only as to the constitutionality of the board's enactment, but as to the pure food and drugs law and the sanitary code's applicability to the whole state as the paramount hygienic and sanitary law of the state. On June 4th Associate Justice Provosty, as the organ of the court, with the concurrence of the entire tribunal, rendered a sweeping decision in which every point contended for by the State Board of Health was upheld. The defendant immediately applied for a rehearing, assigning numerous reasons for the application. It was this application that was refused and the opinion and decree of June 4th therefore became final, and hence the food and drugs law and the sanitary code are now enforceable state laws.

"Visible Dirt" Case Lost by Indiana Food Commission.

A jury in the Circuit Court at Anderson, Indiana, found for the Indiana Ice & Dairy Company in a case in which it was charged by Deputy State Food Inspector Tucker of Noblesville that the company had sold milk in which was visible dirt. The case was originally tried in a justice court and in that instance the defendant was fined \$10 and costs. An appeal was taken to the Circuit Court.

Survey of the Food and Drug World

The Shea Butter of Africa.

The commodity, next to tin, regarded as of the greatest importance in Northern Nigeria, is shea, in the form of the shea nut or shea butter. The shea tree, which is not found in the palm belt or near the coast, abounds over practically the whole of Nigeria between the latitudes of Lokoja and Kano, and the area of its cultivation is therefore served by rail and river transport.

Shea has been exported for some years from districts adjoining the navigable waterways. The total exports of nuts increased from about 2,000 tons in 1906 to 9,000 tons in 1909, but owing to two bad seasons along the river and possibly to the large amount of labor taken for railway work the quantity exported decreased to about 4,500 tons in 1910. From 100 to 150 tons of shea butter appear to have been exported in 1909 and 1910. The Baro-Kano Railway opens up an entirely new field for this product. The basin of the Benue has hardly been touched for shea, and it is estimated that possible exports from Muri Provinces alone would be limited only by the capacity of the river steamers available.

Shea butter is used by the natives in Northern Nigeria and other parts of West Africa as an illuminating oil, for cooking and as a medicine in the form of an unguent for rheumatism and other ailments of the body. For this latter use the natives prize it very highly. In appearance it is between that of beef tallow and mutton suet.

Net Weight Tolerance in Montana.

Fifteen and one-half ounces of butter hereafter will constitute a full legal pound in Montana, the State Board of Health deciding to allow half an ounce for evaporation. The point has been under consideration for many months by the board, butter manufacturers insisting that in every pound of butter there is a certain percentage of moisture, and that allowance for its having evaporated by the time the package reaches the consumer should be made by the board, or they would constantly be liable for having sold short weight, whereas the package weighed a full pound upon leaving the creamery.

The board also decided to begin rigidly enforcing the pure food regulations governing creameries, butcher shops, restaurants and other places. The conclusion was reached that enough time has elapsed since the regulations were promulgated to allow all persons affected to make the necessary changes.

California Board of Pharmacy Has an Opium Bonfire.

Everything pertaining to opium smoking and the drug habit which has been seized by the California State Board of Pharmacy since July 1 of last year, was, on May 9, committed to the flames in San Francisco. It is estimated that the board in this way destroyed \$20,000 worth of opium, morphine, cocaine and opium smoking outfits. The vast pile of drugs and paraphernalia formed an immense blaze, and the fire department found it necessary to turn a stream of water on nearby stores and houses to prevent scorching and possible conflagration.

What was burned represented the fruits of 1,500 arrests and caused fines to be imposed amounting to \$25,000. The board still has more than \$20,000 worth of opium on hand awaiting the decision of the court for it to be destroyed in the same manner.

It is said that some of the pipes had a value of no less than \$500. They were two hundred years old, and through long use had become saturated with the drug.

Hard Wheat Flour Appreciated in England.

A large amount of the flour consumed locally in the Nottingham district of England is of foreign origin, but is purchased from wholesale agents and importers situated chiefly in Liverpool, Bristol, London and Hull. A fair amount was originally purchased abroad by Nottingham firms and imported direct, but this method has been abandoned for some years on grounds of economy.

The proportion of American flour used has appreciably declined during recent years; a Nottingham baker, who is one of the largest purchasers in the district, giving as an example of the present tendencies an order he has just placed for 500 bags, 100 of which are American and 400

Canadian. A remark of his was interesting: "We should be sorry to do without the stronger American grades, especially Minnesota and Dakota wheats; we consider them superior to anything that comes from Canada." Flour is purchased by the bag, containing 140 pounds, instead of by the barrel.

Chinese Dressed Hogs Exported to England.

Hankow is the center of the Chinese export trade in dressed hogs, the industry being entirely in the hands of the International Export Co., Ltd. All the foreign shipments, amounting in 1910 to 21,523 carcasses, go to Great Britain. The 1911 figures are not yet available, but the company handling the trade places the shipments at 19,903 carcasses.

There has been some misapprehension as to the food on which these hogs are fed. This is usually rice bran, refuse rice, and other grain from native breweries and distilleries, bean oil cake, and the hulls, etc., left from the manufacture of bean cured. While the scavenger pig also exists, it is apparently not the source of the ordinary meat supply for the foreign market. The conditions under which the animals are slaughtered and dressed are said to be satisfactory and the buildings of the local plant are modern and well kept.

In 1911 an official investigation of the entire industry was made by Dr. Reginald Farrar, of the local government board, London, who prepared an extensive report. It appears that parasitic and tubercular infections of Chinese pork are comparatively rare.

Decision in Wrapped Meat Case.

The Minnesota Supreme Court has ruled that the sale of wrapped meats which shrink after wrapping is not necessarily fraud on the part of the seller. To prove fraud it must be shown that the sale was made with fraudulent intent. The decision was made in a case brought against Armour & Co. for alleged violation of the weight law, wherein Friedman Bros., butchers of St. Paul, charged they were forced to pay for wrappings at meat prices. The St. Paul Municipal Court declared Armour & Co. guilty and assessed a fine of \$50. An appeal was taken. The Supreme Court said, in ordering a new trial, that to make a prima facie case of fraud the intent to defraud must be shown.

Average Crop of Olives in France.

While fairly abundant in certain districts, the French olive crop for the year 1911-12 appears to be of only average size. In the Var the production is estimated at 18,950 metric tons, as compared with 22,000 tons for the previous year. There are no available statistics for the other regions. The total crop in 1910 was 71,084 tons, as compared with 48,582 tons in 1909 and 125,212 tons in 1908.

A ministerial decree promulgated on March 24 fixes at 18 francs per hectare, or \$1.40 per acre, the rate of bounties that will be distributed to the French olive growers for the year 1911.

Dried Strawberries Proving Popular.

A berry grower of the State of Washington is reported by the *California Fruit Grower* to have discovered, after many experiments, a sun-drying process for strawberries which has proved so successful that he now receives orders for the product from many states in the Union, and also from Alaska. He intends later to organize a company and turn out the fruit on a large scale.

Requirements for Graham Flour in South Dakota.

Dr. A. N. Cook, Food and Drug Commissioner of South Dakota, has issued the following bulletin on Graham flour: "Notice is hereby given that all Graham flour sold in the State of South Dakota, subsequent to January 1, 1913, must be 'unbolted wheat meal,' according to the Federal standards, which are the standards adopted for the State of South Dakota."

Must Label Flour When Bleached.

The State Department of Agriculture of South Carolina has issued a notice that, after July 1, flour offered for sale in that state, bleached by any process, must be labeled "Bleached" in letters not less than one-half inch in height. The state inspectors have been instructed to enforce the law.

CONVENTION PROCEEDINGS.

(Continued from Page 71.)

store, or would you consider it an adulterated drug, and dispose of it?

Mr. Allen of Kentucky: Under your laws of Oklahoma, like the Federal law, if it is below the standard, say like goods on the shelves of druggists which are sold under the United States Pharmacopoeia names, should not be sold without informing the consuming public that it has deteriorated, and that is true with respect to potent drugs, such as digitalis. For example, if deteriorated drugs should come from New York to your state, you don't know who is responsible, but to give you a way into the court, you immediately arrest these goods, and the other questions will be settled just as the other side wish, but you have stopped them.

Mr. Ladd of North Dakota: As food commissioners, have we the authority to go into the United States court, with a case direct?

Mr. Allen of Kentucky: Not direct. It is for the district attorney to consider whether you have a case. I have considered it in this way: you have a United States attorney who is in sympathy with you; my proposition is to open the doors so the state can go direct to the Federal court on these interstate questions, and when you do that, you will create a uniformity throughout the United States.

Mr. Emery of Wisconsin: When the law provides you shall proceed a certain way, for instance, these goods must be examined, now are you going to ship these goods contrary to this law to the district attorney?

Mr. Allen of Kentucky: The Supreme Court of the United States has decided that it is not necessary to conviction. Mr. Emery, you could go direct to your United States court, present your libel, and get your seizure.

Mr. Emery of Wisconsin: That is the reason I am not in sympathy with that uniformity. I think it is too defective.

Mr. Ladd of North Dakota: I have proceeded on two cases in the United States court, and seized those goods as an officer to thresh out what the limitations of the law are. I maintain I am justified under the terms of that law, and I am not bound by those technicalities that bind the United States officials in connection with the matter, and there are several other features arising with regard to the condition of the packages.

Mr. Emery of Wisconsin: You may not be bound in your case by the prejudice of the district attorney.

Mr. Flanders of New York: I would like to ask, how does Mr. Ladd seize the goods, as a state officer, as a national official, or as a private individual?

Mr. Ladd of North Dakota: I seize them under the provision of that act that authorizes a health officer or food commissioner to proceed. I maintain it has no connection with the other clause that controls the action of the United States officials.

Mr. Flanders of New York: You seize as a state official, and prosecute under the national statute?

Mr. Ladd of North Dakota: Yes, sir.

Mr. Allen of Kentucky: I suppose you do this way: You find an original package of adulterated vinegar, you analyze it, and your chemist swears that it is adulterated; your inspector swears it came into a certain place in your state, and you present the paper to the United States attorney, and he appeals to the court for a hearing in Admiralty.

Mr. Ladd of North Dakota: Yes, sir.

Mr. Allen of North Carolina: In North Carolina we do not have to go to the courts for permission to seize. We have authority, under our law, to seize goods, and if we find that it does not comply with the requirements of the state law, we seize as state officials. If we find it is in violation of the national law, we simply notify the United States department, and turn it over to them, if they wish to handle it. If they do not, we proceed under the state law. Of course the laws would apply to the retail men. In case of some corn meal, we seized it because it had spoiled, and we held it until we could communicate with the United States authorities, and that took it back to the man that shipped it into the state.

The Chairman: The time has arrived to close this paper. The thirty minutes is up and we will pass to the next paper by Hon. H. F. Potter of Connecticut: "Should a Portion of the Official Sample be Given to Dealer at Time of Purchase?"

Mr. Potter: Mr. Chairman, this subject which I have to present to you today can be presented in a very few words. It could be enlarged upon to a considerable extent, but I think I have confined by paper within the ten minutes' time

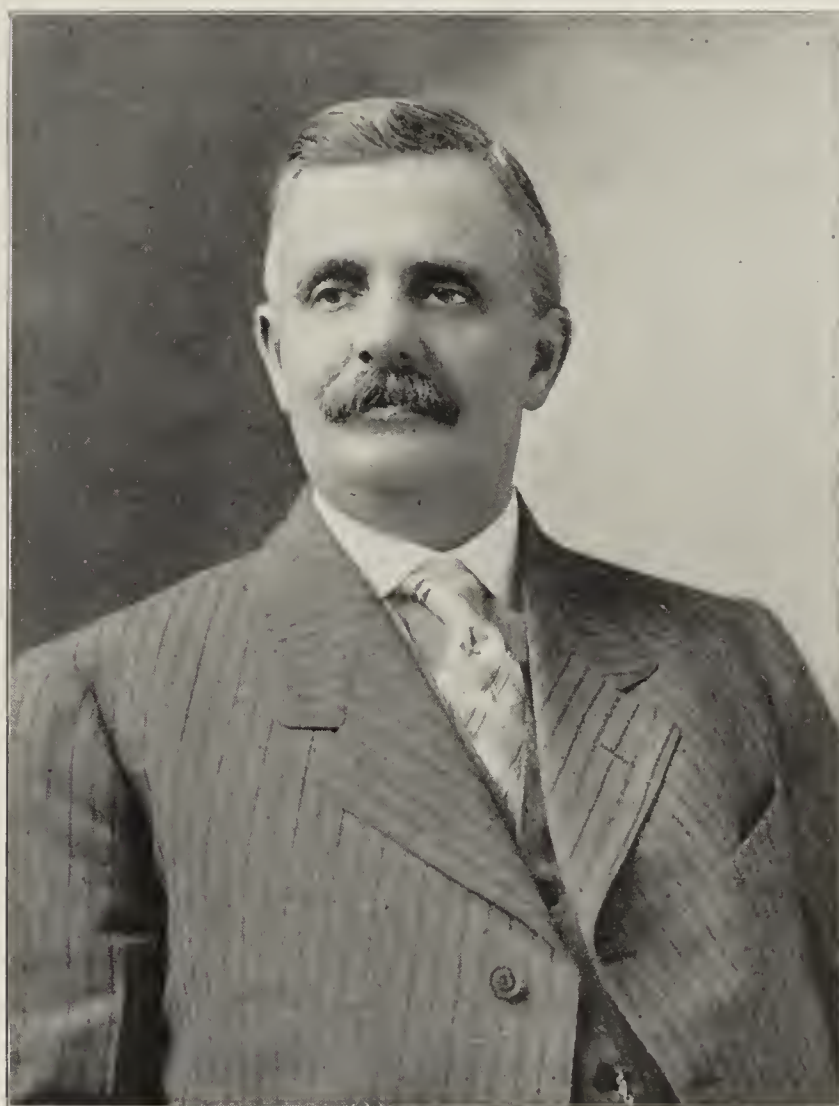
allotted by the chairman. The question is, "Should a Portion of the Official Sample be Given to Dealer at Time of Purchase?" I will cite the Connecticut law.

SHOULD A PORTION OF THE OFFICIAL SAMPLE BE GIVEN TO THE SELLER AT THE TIME OF PURCHASE?

By H. F. Potter.

Under the Connecticut pure food law samples collected by the department must be divided into three equal parts and each part labeled with identifying marks, one of said parts must be delivered to the person from whom the purchase was made or if a guaranty has been given, such part shall be delivered to the guarantor; one of said parts shall be sent to the Connecticut Agricultural Experiment Station and one part shall be held under seal by the Dairy and Food Commissioner. The parts of the sample so divided shall be sealed by the person collecting the same, with a seal provided for that purpose.

This question has decidedly two sides to it and for the purpose of this paper I will designate them as the merchant's side of the question, which he invariably calls his rights, and



HUBERT F. POTTER,
Dairy and Food Commissioner of Connecticut.

the consumer's side, which the pure food department is supposed to protect.

The merchant or purveyor of foods and drugs should be looked upon by the department which is attempting to enforce the pure food and drug laws as an honest, upright citizen of the community where he is located, and he is entitled to that reputation until it has been proven in the courts that he is not.

It is my opinion that there are only a very few merchants who intentionally violate the food and drug laws and for this reason I believe that the merchant who wishes to do an honest business should be protected as far as possible from any errors which might possibly be made by some one connected with the food and drug department. I had rather a large number of criminals would escape punishment than to be the cause of making one innocent person a criminal.

Looking at the question from the standpoint of the merchant, I can see why he might reasonably think it would, in some instances, be a protection to him to have a part of the sample delivered to him, but taking up the other side of the question, which is the side that interests the consuming pub-

lic, and I think most of you will agree with me, that if an inspector could go into a store as an ordinary customer and buy whatever he wishes without disclosing his identity, he could find out very much easier whether the merchant was doing an honest business or was deceiving his customers. After a sampling agent, who has to divide his sample with the merchant, has made one or two purchases at any particular store, he becomes known by the proprietor and clerks and then he is unable to detect the clerks or the merchant who is dishonest enough to, when a customer comes into the store and asks for a quart of cider vinegar, sell him compound distilled spirit and molasses vinegar if he does not happen to have the cider vinegar, and say nothing. This happens very often and it is hard for a sampling agent who is known by the proprietor and the clerks to detect the fraud. There are some merchants who think it is not a criminal act to make a sale like the one referred to above.

I could give you many other examples similar to the one just mentioned. I will only mention one more. Take, for example, renovated butter. There are a good many merchants who sell renovated butter without informing the purchaser that it is renovated, but when an inspector comes into the store to buy he is known by the proprietor and when he buys renovated butter he is told the truth about it.

The honest and careful merchant has nothing to fear from a food and drug inspector, but the departments need all the encouragement and help they can get to detect the fraud and deceit practiced by the careless and dishonest merchant, and if the inspector can go into a store as an ordinary citizen and purchase anything that he has reason to believe is being misrepresented, without revealing his identity, he can continue to do good work for the department indefinitely; but let us look at the subject as broad minded men who are authorized to see that the pure food and drug laws are complied with. I do not think we, as state officials, will have any better success in our efforts to rid the state of impure and misbranded foods and drugs by appearing to antagonize the manufacturers and dealers than we will by attempting to work in harmony with them. I do not think very many of the manufacturers of and dealers in foods and drugs mean to be dishonest in their methods, but there is occasionally a person who knowingly becomes a criminal by his trickery and when we are trying to get evidence against such a man we need all the help we can have in the way of laws some of which might seem to the honest dealer as arbitrary. All manufacturers of foods and drugs know, or should know, whether their goods are honestly put up or not, and if they are not they should be made to suffer the penalty, and if the dealer will only demand a legal guarantee when he purchases his supply from the manufacturer or jobber, he will almost invariably get goods that will comply with all of the requirements of the law.

After carefully considering this subject, I cannot see why the honest merchant should care for a duplicate sample. In my experience of four or five years in this work I do not think a half dozen duplicate samples have been analyzed by the merchant from whom the sample was taken, and this would indicate to me that the duplicate was really not cared for. If this is the fact, why should the state department be required to go to this extra expense and trouble? If all men were honest in their business dealings with others there would be no need of a pure food and drug law; these laws are placed on our statute books for the protection of the public and then men who are authorized to enforce such laws should be given all the help possible in their efforts to detect fraud.

In closing, I wish to state to this convention that I think probably all of the men empowered to enforce the food and drug laws are honorable men and are attempting as best they can to see that all deceit and trickery is exposed and the guilty person made to pay the penalty, but do not make the mistake, which some will find very easy to make, by attempting to gain notoriety by causing a larger number of prosecutions to be made than did the former commissioner. I think more credit should be given a department which succeeds in having the laws complied with without many prosecutions than one which causes a large number to be made, and this can only be accomplished by coöperation and not by antagonizing the manufacturers and merchants.

Finally, let us all go to work with the determination to try and make our own state the best state in the Union, as far as living up to the requirements of the food and drug laws are concerned, and if you think you can accomplish more by not being required to leave a part of the sample with the merchant, then it will be your duty to try and have the law so framed, but if conditions in your state are such that in your opinion you can accomplish more by leaving a

portion of the sample purchased with the merchant, then it is your duty to try and have the law framed that way.

The Chairman: We now have twenty-one minutes for the discussion of this paper and I will ask Commissioner Emery to open it with a three minutes talk.

Mr. Emery: Mr. Chairman, I had no expectation of opening it or taking any part in it.

The Chairman: Well, go ahead.

Mr. Emery: But in Wisconsin we are not required to furnish samples to the dealer when we make the purchase unless in cases where we seize the goods and he asks for it. I see no sufficient reason why the inspector should not go into the store as the ordinary customer goes and make the purchase as the ordinary customer makes it and have the determination made upon such sample gathered, and I don't believe that any dealer is entitled to a great deal of consideration who is not willing to submit to that kind of practice. I do not believe the honesty of one who is not willing to have his ordinary method of dealing with his customers tested is so great that it needs to be exalted in any community or in any public meeting.

I am not in favor of it, if you please, Mr. Chairman—that is one of the reasons why I would not be a very zealous advocate of uniformity with the national law. Our friends of the National Grocery Association as soon as this law was passed saw to it that by their special counsel employed they prepared a law that was satisfactory to them. They said, "If we must have a law, let us fix the law as we want it and get it so we can manipulate its administration as much as possible." And into that bill was put this provision. I have from the first objected to that as one of the features, and it was taken to various states that had no experience in these laws and in that condition it was put upon the states. And I have been extremely interested in this meeting to see the food commissioners' expression of discontent with such of these features that came into their laws before they were aware of what were coming into the laws. And, to go back to my former statement of years ago, it will be time to have the state laws modeled after the national law when it has been demonstrated in the courts that that law is constitutional and that that law secures ample protection to the consumers.

Mr. Flanders of New York: The State of New York has a law providing that a duplicate sample shall be given to the vendor and he is given a sample for his own protection, so if our chemist makes errors he can come into court and show the error there. Otherwise we do not, as a rule, give samples. We do not give samples as a common matter. I understood this was for the purpose of giving the vendor a chance to defend himself.

Mr. Jones of Illinois: Mr. Chairman, in Illinois our law requires in certain food products that a sample shall be given, and we have a little bit different condition, I think, in Illinois, especially in Chicago, than many of you have. The law works in the main, I think, pretty well, and everyone appears to be pretty well satisfied with it. There is some trouble. But the reason why I think it worked well is, that when we give a duplicate sample, we take enough of the sample so that our chemist may have some left of the sample after making analysis, and if there is any question about the chemist, if there is any question about the analysis made by our chemist, we have a sample there of the analytical chemist, and enough so that the chemist that has analyzed it and our state chemist, that is, the state chemist who has charge of the matters, can have other chemists in the laboratory make a test of the analysis. Mr. McKinley is here—our attorney who does the prosecuting. So far as I know, we have never fallen down on any of those cases, and on account of a sample I think it has worked pretty well. We are satisfied with it. And there is another thing about it that I sanction in its favor. If he has a duplicate sample, the manufacturer can take it, and our law provides he can, to any reputable chemist to analyze it if he wants to. Then there is no question. We have the sample submitted for approval, and it shows we are absolutely fair, and that the dealer, whatever his line may be of manufacturing, can see that we are only trying to enforce the law, and if he has any doubt he can have his chemist analyze it. The great trouble about this matter is if you don't do that, there probably will be charges that the chemist was wrong, that it was not a fair analysis or something of that kind. This absolutely does away with it. We did, years ago, have our analyses challenged, but in later years we have hardly had any trouble along that line at all, and I think it is due to the fact that we gave the duplicate sample. I think, with my experience, or with the experience we have had in Illinois, it works

admirably and, while it is inconvenient in some cases, I think the state food department ought to do that way in taking samples. There are two parties to be protected, first, the consumer, and next, the party from whom you take the sample—he ought to have a fair show. That gives it to him, and if it comes to prosecuting and convincing and so forth, the public will say, "He got his just deserts," and the sympathy of the public is not with him, but with the department.

Mr. Judd of Oregon: I would like to emphasize, Mr. Chairman, what Mr. Jones has just said. Our law requires that two samples shall be taken and one left with the party from whom the samples are purchased; and the result has been in a great many cases this sample that has been left with the dealer has been sent to commercial chemists, and they have analyzed it, with the result their figures agree with ours, and therefore, latterly, there has been very little of that work done because the parties have known that the work done by our laboratory is fair and satisfactory to them, and they have more confidence in the laboratory since they have been able to get their samples analyzed than before. So we think the duplicate sample proposition is a good one.

Mr. McKinley of Illinois: Referring to Mr. Jones' statement, we have found in matters of prosecution the giving of a duplicate sample has worked rather to our advantage in this way. Under the oleomargarine law in Illinois we are not required to give any duplicate sample. Naturally, it would tend to render the law void or nugatory if we did give a sample because that would pass inspection on quality compared with butter and there would be no case.

Invariably we meet with this proposition when it is tried by jury—and those food cases are always tried by jury—if they don't plead guilty. The point is raised that there is some trickery and they try to put one over on us and assert they had no notice and no chance to analyze and to prepare to defend, and the defender will claim that he is taken at a disadvantage and that he is not given a square trial. And we find it difficult to get convictions in the butterine cases.

On the contrary, in the food cases, we give a sample and the seller has a chance to analyze it, and it disarms criticism against the law and against the procedure, and it is heard in court and before the commissioner, and he has had a duplicate sample and it is all the reasons in the world that we can argue to the jury that his product is illegal.

In other words, he cannot come back and say to us, "I did not have a square deal. I did not know what the case was about and I did not know at the time you took it that you were food inspectors." For that reason, I say, purely from the question of prosecution, it has resulted in an advantage, and in the second place, has disarmed all criticism of the methods of the department.

Mr. Hansen of Nebraska: Mr. Chairman, I did want to say something, but I almost changed my mind. I will say, however, that in Nebraska we take three samples—one for the chemist and one for the office and one for the prosecuting attorney. So we have plenty of proof, always, regarding the product, and our law provides for that. We find that is good, for the reason we have never had the analysis of our chemist disputed.

Mr. Caspari of Maryland: I might state, Mr. Chairman, for my state that our law does not require the taking of more than one sample; but in a large number of instances, in foods, we do so, simply for the purpose in case of subsequent disagreement with the seller. We generally buy three—sometimes six—samples, if the packages are very small. But we never deliver them to the seller. They are kept under lock and key in the commissioner's office. In fact, the inspector who buys them has them in his own locker and from there one or two of the samples are passed to the chemist's laboratory under seal and he then keeps them in his locker under protection. If the question arises at a hearing—by the way, as I stated before, we always have hearing in Baltimore—and the seller or the vendor claims the privilege of having it analyzed, we give him one or two of those packages, according to the number we have. If it is a lot of bulk goods, we buy a quantity—a pint or quart—something as they do in other states; and the chemist takes from that package or from that bottle as much as he may deem necessary and preserves the balance for future verification.

I might further add that our chemical analyses are always made in duplicate. That is, made by two different chemists. If there is a disagreement between the two chemists, then one or two other men—we have four chemists in the laboratory—take it up. That is all done before the hearing. So we go to the hearing pretty well fortified with our assertions as to the violation of the law. But, inasmuch as our law does not require the furnishing of duplicate samples to

the seller, we do not do so except on demand. I thought that might interest the convention.

Chairman Foust: Mr. Potter, please take the chair.

Mr. Foust of Pennsylvania: Mr. Chairman, I will just state that in Pennsylvania our system is very much like this of Maryland. I am uncompromisingly opposed to a duplicate sample. There are many reasons for it and that is more especially true in states like Pennsylvania, and I think it will apply to New York and, possibly, Illinois. However, they seem to be getting along very well with it.

We had a chocolate case on trial some two or three years ago, and the attorney for the defense presented a motion to the court asking that we supply a part of our sample in order that their experts might go into an analysis of it and check up whether our chemists were correct or not. And this motion was very ably argued by counsel on both sides and an opinion written by the court. It was in the county where I happened to live and I was anxious to get a written opinion on the subject. And the court decided that this was not a civil case where it was decided on the weight of the evidence, but it was a criminal case and the burden was on the commonwealth to establish the guilt of the defendant beyond all reasonable doubt, and that they would not be required to give a part of their case to the defense in advance of the trial in order that they might prepare their defense and he overruled the motion and, in writing that opinion, he said with all the murder cases tried in this state where bloody garments appear as evidence and the fact that they did not, in presenting this motion for a division of this sample that they might have a part of it, cite any authorities, with all of these cases on record, that the garment be torn in two and a part of the garment given to the attorney or the experts of the defense to examine the blood stains, was the best evidence that the motion was not well-founded; and he overruled it.

Now, that is just the question. If all chemists were absolutely honest, why that rule might work all right, but I want to say back in Pennsylvania if we gave them a part of the sample they would find a chemist every time they wanted to find one to create that reasonable doubt and absolutely nullify our law.

And I will say this, however, I agree with what Commissioner Jones says and what some others have said here, that if a firm will come to me and say, "Foust, your chemist made a mistake; we made this stuff and we know what is in it," I will say, "Now, you go and select some other chemist. We buy lots of material like you make. You select another chemist who is not in the employ of the trade; I mean of any manufacturer of the product in question, and one who is familiar with food analysis and we will select another chemist of our own department and we will have a joint analysis and we will check up whether our first chemist has made a mistake or not." We do a great deal of that, even if a case has been filed and may have been presented to the court, before it is presented to the grand jury or after a true bill is found, if anybody comes to me with a statement that appeals to me, I go to the jury at once to check up to see that no injustice is made or any mistake is made. But I want to say I am uncompromisingly opposed to giving the defense a part of our case in order that they may go and hire some sort of a chemist and create that reasonable doubt, because if an expert goes on the stand and qualifies and has taken a course in chemistry, then there is that reasonable doubt, in our state, and the court will instruct the jury that under that state of the evidence the verdict must be not guilty.

Mr. McKinley of Illinois: Mr. Chairman, I wish to ask a question there. Suppose you bought a sample from the retailers of an article put up by a manufacturer and he is prosecuted on this sample, do you think he has a fair chance if he has no opportunity to examine that chemically? In other words, he has to depend upon the integrity or ability of your chemist and has absolutely no defense except to cross-examine, has he?

Mr. Foust: I will just answer that this way: He knows where he purchased the article. If he purchased the article in the state, he has all the protection he wants, because we, without being authorized to do it, transfer it to the one from whom he made the purchase and in that way the retailer is protected. The law does not compel us to do it, but our Supreme Court has ruled in this way, that if a firm purchases or is engaged in the sale of food commodities—this is on the question of guilty knowledge—that they must know, they must give indemnifying bonds that the health of the people may be preserved, and therefore the burden is put on the one who sells and if they sell without giving indemnifying guarantees to protect their sales, they must stand trial.

Mr. Emery: Mr. Chairman: That is a part of a food law that should not be upheld. Way back in New York the Court of Appeals made this decision in the early history of food legislation, wherein it said this effort to protect the public by these repressive measures was found to be absolute failure, where one is made a defendant upon the proof of intent or knowledge. The court went on to arraign the conditions of those early days, way beyond anything that has been given in these more recent years; and said, certainly the condition of things will warrant legislation that throws upon the dealers the responsibility for the purity and the quality of the product that he sells and compels him to take that burden. And from the day of that decision up to the present time, our food laws have proceeded upon that one theory.

Now, these innocent parties, these innocent men, are required in the purchase of their foods so to deal and to get guarantees—not, gentlemen, a guarantee that shall simply save their necks and have no protection whatever to the consumer—but a guarantee that shall be valid throughout; and that was what the courts held and that is the theory of our food laws, and there is no other known theory at the present time that will secure protection under our existing conditions.

The Chairman: Time is up. The next paper is by the Hon. A. H. Jones of Illinois: "In Purchasing Food Samples, Should the Sampling Agent Disclose His Official Position to the Dealer?"

Mr. Jones of Illinois: I was not sure I was coming and I got my article up in a hurry and so I did not give it quite the attention I would have liked to have done.

IN PURCHASING FOOD SAMPLES SHOULD THE SAMPLING AGENT DISCLOSE HIS OFFICIAL POSITION TO THE DEALERS?

By A. H. Jones.

Criticism is neither hostility nor scorn. The motives that impel a thoughtful observer to condemn much that is accepted by the people is not the wish merely to injure or to contemptuously deride or dismiss the popular notions, but the desire that the age shall excel in all kinds of work and that the people shall both be the best and have the best.

A great poet asserts the doctrine that "whatever is, is right." Another equally as great and wise asserts that "whatever is, is wrong." There are writers who celebrate the glories of the present age, and who continue to administer to vanity by informing the people that they are but little lower than the angels. Such writers are not the source of strength and health. The world does not prosper through being flattered. Too much is heard about the rights of man; too little about his duties. The moralists who frankly tell a people the truth when that people, as often happens, is doing wrong and going wrong, are better friends of mankind than the flatterers of the popular mood and conduct.

In ancient days it was said by one who was arraigned for his inhumanity, "Am I my brother's keeper?" That saying was the essence of selfishness—a selfishness that the better part of the intellectual world has outgrown. There cannot be one law for persons of superior mental endowment and another law for the rest of mankind. Knowledge avails nothing unless it be communicated. Blessings are but half blessings if you keep them to yourself. Those who have clear vision and stalwart strength of mind should guide the rest of the world. The advancement of all human beings concerns every individual. The safety and position of the top of the pyramid depends on the security of the base. The enlightened food officials know that it is both self-interest and benevolence to keep the multitude in the right path—to civilize, refine, to lead upward the masses of mankind so that their eyes may be opened to beauty, their minds to truth, and their hearts to gentleness and aspiration. The guidance of the people is the duty of the food official, and if he performs that duty, he will sometimes speak in terms of censure and he will make the censure positive enough to be felt and to be productive of good results.

The health and morals and culture of the people are the foundation of society, the state promotes them under its police power which is necessarily a power always in any government and the state's power of police in that regard was never surrendered. Even against the express provisions of the constitution of the United States a state may exercise this power. To protect the public morals or the public health a state may do an act prohibited by the constitution. The constitution of the United States expressly prohibits and says that "No state shall.....pass..... any

law impairing the obligation of contracts." But under its police power any state may pass laws "impairing the obligation of contracts" even if that state itself is a party to the contract.

The scope and work of food inspection on the part of the state government is well set forth in Sections 2, 3 and 4 of the Illinois state food law. It may be well, however, in a short time, to give you some additional idea of the nature and scope of inspection referred to, in order that we may understand the rights and duties of the inspector in taking samples—for every inspector, in taking samples of food, is governed by the laws of his state.

The Illinois state food law provides in Section 2, that the inspector shall be duly authorized to take samples as often as they may deem necessary for the purpose of determining whether any manufactured food complies with the law, and that they shall examine the raw materials used in the manufacture of food products and determine whether any filthy, decomposed, or putrid substance is used in their preparation. They shall also examine all premises, carriages, or cars where food is manufactured, transferred, stored or served to patrons for the purpose of ascertaining their sanitary condition and may examine and take samples of the raw materials and finished products for the purpose of having the same analyzed to determine whether they are legal articles of food or not.

Under Sections 10 and 29 of the law, if the article of food or drink is adulterated or misbranded within the meaning of the state food law, or labeled or branded contrary to the provisions of the act, the inspector may seize same and have it condemned and confiscated under the provisions of the law.

Under the sanitary food law of Illinois, which went into effect July 1, 1911, it is made the duty of the inspector, in the State Food Department, to inspect every building, room, basement, enclosure or premises occupied, used or maintained as a bakery, confectionery, cannery, packing house, slaughter house, creamery, cheese factory, restaurant, hotel, grocery, meat market, or as a factory, shop, warehouse, or any public place or manufacturing establishment used for the preparation, manufacture, packing, storage, sale or distribution of any food as defined by statute, which is intended for sale to see that it is adequately lighted, drained, plumbed and ventilated, and as to the purity, wholesomeness and condition of the food therein produced, prepared, manufactured, packed, stored, sold or distributed.

There are many other duties devolving upon the state food inspector of Illinois connected with the enforcement of the state food law, as well as the state sanitary food law not referred to above, for the reason that reference to the same would not throw any light upon the subject assigned me for discussion, consequently, I have only referred to some of the more material requirements of the state food inspector in order to show that the duties of purchasing food samples is one of the lesser duties with which he has to contend.

The purchasing of food samples, as a general proposition, should be taken in a manner that will not acquaint the persons from whom the sample is procured with the purpose of the purchaser, or identity or intention of the inspector, at least until after the sale and delivery is completed. This manner is made necessary by Sections 3 and 4 of our pure food law, which reads as follows:

"Section 3. Refusal to Assist Inspector a Misdemeanor. Whoever, by himself, his agent, employe or servant, hinders, obstructs, or in any way interferes with any inspector, analyst, or officer appointed hereunder, in the performance of his duty, or in the exercise of his powers as defined in this act, or whoever being an employe of a railroad, express company or other common carrier, refuses or fails upon request to assist the State Food Commissioner, the Assistant Commissioner, the State Analyst, or any inspector appointed hereunder in tracing, finding or disclosing the presence of any article of food prohibited by law and in securing samples thereof as provided for in Section 2 of this Act, shall be deemed guilty of a misdemeanor and shall be punished as hereinafter provided for.

"Section 4. The person taking such sample as provided for in Section 2 of this Act, shall in the case of bulk or broken package goods, divide the same into two equal parts, as nearly as may be, and in the case of sealed and unbroken packages, he shall select two of said packages, which two said packages shall constitute the sample taken, and properly identify the same, he shall, in the presence of the person from whom the same is taken, mark or seal each half or part of such sample with a paper seal or otherwise, and shall write his name thereon and number each part of said sample with the same number, and also write thereon the name of

the said dealer in whose place of business the sample is found, and the person from whom said sample is taken shall also write his own name thereon, and at the same time the person taking said sample shall give notice to such person from whom said sample is taken that said sample was obtained for the purpose of examination by the State Food Commissioner. One part of said sample shall be taken by the person so procuring the same to the State Analyst or other competent person appointed for the purpose of making examinations or analyses of samples so taken, and the person taking such sample shall tender to the person from whom it is taken the value of that part thereof so retained by the person taking said sample; the other part of said sample shall be delivered to the person from whom said sample is taken. If the person from whom said sample is taken has recourse upon the manufacturer or guarantor, either by operation of law or under contract for any failure on the part of said sample to comply with the provisions of this Act, then said person from whom said sample is taken shall retain for the period of six months that part of said sample so delivered him in order that said manufacturer or guarantor may have the same examined or analyzed if he so desires.

"Provided, that the person procuring said sample may securely pack and box that part thereof retained by him and send the same to the State Analyst or other competent person appointed hereunder, and the testimony of the person procuring said sample that he did procure the sample and that he sealed and numbered the same as herein provided, and that he wrote his name thereon, and that he packed and boxed said part thereof and sent the same to the State Analyst or other competent person appointed hereunder, and the testimony of the person analyzing said sample that he received the same in apparent good order, that said sample was sealed, and that the number thereof and the name of the sender, as herein provided for, was on said sample, and that the seal at the time the same was received was unbroken, shall be prima facie evidence that the sample so received is the sample that was sent, and that the contents thereof are the same and in the same condition as at the time the person so procuring said sample parted with the possession thereof, and the testimony of said two witnesses as above shall be sufficient to make prima facie proof."

It will readily be seen that should the inspector make his purpose known to the dealer before the sale is completed the dealer would either not have the article of food called for that might be illegal, or he would not sell him the article for what it really was, but in imitation or representation, of a higher priced article, as is so often done.

The first thing that a food inspector should do after entering the store, or place where samples are to be purchased is to secure the samples just as any private citizen would secure them, without making his official position known, and after he has consummated his purchase or purchases and secured the samples, as required by law, then he should make a thorough examination of all the articles of food sold, to see whether they are properly labeled, or branded, as required by law, as well as to see whether they are in proper sanitary condition and prepared so as to meet the requirements of the food law.

Therefore, he should not let his identity be known as state food inspector, until after he has taken the sample as required by law, then he should let his identity be known and proceed according to the requirements of the laws of the state under which he is acting.

Our food inspectors generally understand this, and that it is necessary for them to not make their official position known until after they have secured the sample, or samples, and are ready for the general work of inspection, such as examining the stock of goods so as to discover whether the goods are prepared, labeled, stamped or branded to meet the requirements of the laws of his state; also to ascertain their sanitary condition and whether they are fit for human consumption and comply with the laws under which all foods are to be kept as well as prepared, manufactured and sold.

In my judgment, the work of inspection, so far as purchasing samples, would be a farce, if the inspector informed the purchaser of his official position before purchasing the sample as the dishonest dealer would never sell him an article of food in violation of law, consequently, the work of inspection insofar as purchasing the sample is concerned would be a useless undertaking and the state would better do away with that part of the work entirely, should this method be adopted.

The Chairman: I will ask Mr. Barney to open the discussion on this paper with three minutes. I would also,

before he starts, say now under this program we will be through here and complete this work promptly at five o'clock. We are running on schedule time and I trust that every one here will stay here until we clean up this work, and we can all get away from this building at fifteen minutes after five. Mr. Barney.

Mr. Barney of Iowa: Mr. Chairman, our laws provide in just a few cases that we give samples, but there is no provision made as to whether a man shall make his business known when he goes into a place of business. Now, I think Mr. Jones has given us a very excellent paper and there is a question I would like to ask Mr. Jones, which I will have him answer when I sit down and that is this, How is he to find a man who has, say, five or six counties as a territory which he has to look after, to prevent the merchants in that territory from becoming in a measure acquainted with the inspector so that they may know when he goes into a store what his line of work is? I think very generally that our inspectors are known to the merchants of the state. I can see that in a large territory that might be due to their inability to become acquainted. I feel certain that most of our inspectors, when they walk into a store, generally know the proprietor and possibly some of the clerks, and I think it would be impossible to have a man go over a territory any great length of time and not be known. Now, so far as milk is concerned, we take up our samples there. We have milk inspectors in towns of more than 10,000 inhabitants. Now, the milk inspector must certainly be known in towns not larger than that and when he goes into a store to buy a quart of milk he is very sure to have been in there before, and I don't understand quite how we could get around that sort of trouble because we could not change the milk inspectors in these different towns. They live there, they do not have sufficient salaries or sufficient pay to permit them moving around from place to place. I can see possibly you might avoid the trouble by changing their duties. I would like to ask Mr. Jones.

Mr. Jones: We have eighteen inspectors in Illinois. We give each an assignment of territory and ship them there. Another thing, we have some one else go with him and that one goes in and purchases a sample where the inspector is known and the inspector stands back and waits until the sample is taken and acts as a kind of a witness and the two methods together—by switching around—do not give us much trouble in that respect.

Mr. Potter of Connecticut: Mr. Jones, you pick up some one that you have not got control of to go with your inspector?

Mr. Jones: Yes, sir.

Mr. Potter: Not a regular man?

Mr. Jones: Oh, no, sir.

Mr. Cutler: Do you use lady inspectors in securing a sample or lady witness?

Mr. Jones: No, we do not. We did formerly. We found out this, that ladies are a little timid about going into court and they make the poorest witnesses on earth. They are good on dress parade—fine. I hear lots of this talk about ladies and what they are doing and my friend, Mr. Newman, here, Assistant Commissioner, is strong on the ladies and Dr. Bryan is another. Now, they can give you all this hot air about the ladies that they want, but I want to tell you one thing: When you put them up against it, they never hold good and you never can get them to go and testify. If there is any commissioner here that has had ladies testify, I would like to have them hold up their hands. I would like to see.

(A myriad of hands were raised.)

The Chairman: Hundreds of times.

Mr. Jones: Well, say, there are exceptions to all general rules. We don't have woman suffrage in our state like they do here: I don't want to talk about what the ladies are doing. Just as one gentleman said here yesterday, they can do a wonderful sight of good in enforcing the food laws in this way—not as witnesses, I don't say that. I never could get one into court in my country. They will say at once, "Now, I am willing to give you all the information I can, but I don't want you to bring me in. I don't want to be connected with this." And I appreciate a good woman that feels that way about it. Out here in Washington I guess it is different, where they go and vote all the time and up against the real thing, I guess they do that. I don't know how it is in Missouri—maybe, like Doctor Cutler, I would have to be shown. But they are all right when it comes to enforcing the sanitary laws and keeping clean stores and all that sort of thing. They can do a great amount of good. But here is the fact, I will tell you about getting women—we might as well be honest with each other—they order over the telephone or they leave it with

the hired man or the hired girl. They speak generally and they don't know but very little except generally what is going on. Unless at women's clubs. There they know all about it. They are about the wisest women we know. I do not say that disparagingly, because you go and hear them read about it, hear them tell about it and write about it and from their long arguments and discussions, you would think they performed wonderfully; but don't fool yourself that they are doing all they claim; they are like a great many other good people, they are falling far short of it. I want to say that—

The Chairman: There is a newspaper man taking it all down.

Mr. Jones: If they would only carry out in their everyday life what they say and what they profess to do in their women's clubs, the food commissioners would have a holiday.

Mr. Jackson of Rhode Island: Mr. Chairman, I would like to ask Commissioner Jones a question in regard to our law. The Rhode Island law says that the samples should be divided in equal parts. It is almost impossible for our inspector to divide a sample in exactly equal parts, so that it will hold in court.

Mr. Jones: Mr. Chairman, our law says the same thing as nearly as possible. Now, very frequently, when it comes to extracts and all those kinds of things, where it is put up in bottles, we have to get of the same series perhaps two or three or four bottles so it is possible there to get enough for the analyst or chemist. (Some gentlemen here object to "analyst." I never knew the difference. I am not a chemist myself, but we have always used the term as synonymous, except in my state the analyst is on a little higher plane—he is called the state analyst and he is considered a little different than perhaps in other states. I thought as an analyst he was a little superior. But maybe it is not so in other states and so we apologize to them. It is analyst in Illinois.) But we do the best we can to divide it up. We say this, if an inspector goes in a place and finds only one article left of that line of goods and it looks suspicious, to order the fellow to either dump it or if he does not we will bring it in and see what it is. We do not feel like going to the expense where there is only one article of a line of extracts or something of that kind, say one bottle, to go to the expense of taking it for analysis. The best thing to do is to take it and dump it; for as a general thing the retailer—I am speaking of the retailer—half the time doesn't know what is in the bottle, and we have to use discretion about this matter, and our retail merchants do that invariably. I don't think there is a time in the last year or two when we have not done that. So we are relieved of a great deal of trouble in that way. Once in a while we have trouble in getting enough for a duplicate sample.

Mr. Potter: Mr. Chairman, we have the same law that my friend Jackson from Rhode Island has with reference to the division of samples. The law says the sample shall be divided into three equal parts and one part left with the merchant. Now, we have had some lawyers who, in connection with that, think they are quite smart, and I presume some of them are—and I have had them argue before the judge of the court with reference to that sample not being divided equally. In every case the judge has made the remark on the bench that the object of dividing that sample was that the merchant might have a reasonable part of that sample to analyze and that it was immaterial as to whether the sample was divided exactly equal or not; and I never in my experience of four or five years have lost a case on that ground.

Now, with reference to the detective work that Commissioner Jones has to perform sometimes because of his inspectors becoming known, I have to do that same thing myself and I employed a detective to run down a druggist who was selling cocaine illegally. I employed a detective six weeks, one day in a week for six weeks, to pile up evidence against this druggist who was illegally selling cocaine and I got twelve counts against him in the six weeks time and the court used him so severely that in less than six months he went out of business. We have to employ detectives occasionally in our work. I have more difficulty probably than Commissioner Jones does with reference to my inspectors becoming known by the merchants. Connecticut is a small state. It is about sixty miles wide and possibly 130 or 140 miles long and my inspectors become pretty well known after they have been working a little while and we have trouble to detect fraud through those inspectors without using special detectives occasionally.

Mr. Jackson: Mr. Chairman, Mr. Potter has answered just the points I was looking for, how the courts would interpret the term "equal parts:" because when it comes to a question

of inspectors getting an ounce divided into grains just to the grain, I was afraid we might be thrown out of court.

The Chairman: The time has arrived to take up the next subject. I want, however, in closing, to just say a word. We have a lady in Pittsburgh, Pennsylvania, who wears different disguises. As a rule she has a shawl and one of our agents always goes with her, a man, and she carries a little grip and she takes this shawl and a little apron and puts it on as though she was living in that immediate neighborhood and largely works in oleomargarine; and in that work we have found her very successful and on the witness stand she makes an ideal witness.

Mr. McKinley: I want to just state a word in behalf of the ladies, particularly from Illinois. It is a rather personal experience. I have drummed this matter to my wife so long that she reported the other day she went up to a grocery store near the street car tracks to purchase some goods and she found all the goods displayed in the front of the store. The proprietor was not in, so she refused to take the berries. Later in the day he telephoned down and wanted to know why. She said she would not buy them because they were on the street. He says, "They were not on the street. They were inside." She said, "I was just up there and I won't buy any. They are on the street." The result was that now all his bulk goods and fruits are inside.

The Chairman: That is very good. The next paper is by the Hon. L. Davies of Washington: "Methods of Organization for Food Control Work." Just one moment now. When we leave here this evening, we leave not to return again so far as this section is concerned; and let all the delegates just take all the papers and all their belongings—nothing else—so they will understand they won't have to come back.

Mr. Davies of the State of Washington: Your Chairman asked me to treat this matter particularly from the standpoint of the State of Washington. As this subject dovetails in considerably with the one, two or three subjects preceding it, the paper may serve as a sort of discussion of what has gone before.

METHODS OF ORGANIZATION FOR FOOD CONTROL WORK.

By L. Davies.

With the lack of uniformity in our state food laws there must be a corresponding lack of uniformity in the state "Methods of Organization for Food Control Work." To bring out and discuss these several methods, evolving therefrom ideas and suggestions which each may apply in his own particular state, is, I take it, the purpose for giving this and kindred subjects space on the program. I shall therefore confine myself to methods employed in the State of Washington in food control work.

The Washington state food law is practically a copy of the federal law with, among others, this important commission, in no place in the act is anyone given any authority to formulate rules and regulations for carrying into effect the law other than those contained in the law itself. Consequently the procedure in food control work in this state is very simple, not following elaborately worked out rules but rather the text of the act and constructions placed thereon by the State Attorney General, the commissioner's legal adviser, and by the state courts.

The three sections of the law in point are briefly as follows:

"Section 6. Possession by any firm, person or corporation of any article of food or drug, the sale of which is prohibited by this act, or being the consignee thereof, shall be prima facie evidence that the same is kept or shipped to the said person, firm or corporation in violation of the provisions of this act, and the Dairy and Food Commissioner is hereby authorized to seize upon and take into his possession such articles of food and thereupon apply to the superior court of the county in which such food is seized for an order directing him to dispose of or sell the same and apply the proceeds of the same to the general fund, less the amount required to reimburse the purchaser for actual loss as shown by the bill, provided he or they have a guarantee as required in Section 5; provided, however, that the Dairy and Food Commissioner shall first give notice to the person, firm or corporation in whose possession such goods are found, if in possession of a common carrier, then the consignee of such food or drug, notifying such person, firm or corporation that he has seized such food or drugs, and the reason thereof, and that he has made an application to the superior court for an order to sell or dispose of the same, and that he will call up said application for hearing on a day certain, which shall not be less than ten days from the service of such notice, and that at the hear-

ing of said application the said person, firm or corporation shall show cause, if any they have, why the prayer of the petition should not be granted. Upon the hearing of said petition, affidavits or oral testimony may be introduced to establish the contention of the respective parties. Hearing, however, may be had at an earlier date by mutual consent of the parties to said application.

"Section 7. Every person selling, exhibiting or offering for sale, manufacturing or having in his possession with intent to sell or serve, or delivering to a purchaser, any article of food or drug included in the provisions of this act, shall furnish to the Dairy and Food Commissioner or any of his deputies or any person authorized by him and demanding the same, who shall apply to him for the purpose and shall tender him the price at which the article of food is sold, a sample sufficient for the analysis of any such article of food which is in his possession."

"Section 9. It shall be the duty of the chemist of the State Agricultural Experiment Station to analyze any and all substances that the Dairy and Food Commissioner may send to him, and report to the commissioner, without unnecessary delay, the result of any analysis so made, and when called upon by the said commissioner, the chemist shall assist in the



L. DAVIES,
State Dairy and Food Commissioner of Washington.

prosecutions of violations of the law by giving testimony as an expert or otherwise.

"Section 10. It shall be the duty of the Attorney General and the prosecuting attorneys in the counties of this state to prosecute all cases arising under the provisions of this act."

All official samples taken by this department are secured by regular assistants in the department. The deputies are well known, of course, but where they happen not to be, the samples are purchased as a regular customer would purchase and the official's identity is disclosed only when he has the sample and starts to seal it. Washington laws do not require the purchase of duplicate samples, leaving one with the dealer, but this is done occasionally, especially in taking chopped meat samples in our campaigns against the use of "freez'em" and like preparations in fresh meats. If the sample be package goods it is regularly labeled with a sticker provided and containing, when properly filled out, all data as to dealer, manu-

facturer or jobber, date, etc. If duplicate samples be taken, a duplicate of the sticker is placed on it and a stub like the sticker is kept in the deputy's sample book for record. If the sample be a bulk product, vinegar for example, the container used by the sticker heretofore mentioned is also placed upon the container. The dealer is paid his regular retail price for the sample and a voucher taken by the deputy that he may be reimbursed by the state. The samples are then either carried to, or boxed by the assistant and shipped by prepaid express to one or the other of the department chemists.

When analyses are completed, reports are made to the commissioner on regular blanks supplied. Washington law, as you have gathered from sections quoted, requires no hearings before arrests may be made. This does not mean that arrests are made indiscriminately. Where the offense is patent, as for example, selling milk that has been skimmed, or doped meat, there can be no question of intent on the part of the seller and the case is laid before the Prosecuting Attorney of the county where the sample was purchased and arrest made. Where the illegality consists of some slight technicality for which the retailer is not to blame and of which he is innocent, the wholesaler or manufacturer is reached if he be a resident of the state and the retailer has the guaranty provided by law; if the retailer does not have this guaranty or the manufacture be a non-resident of the state, then the publicity method is used and a list of such illegal products, giving name of retailer, dates purchased, name of products, names of manufacturer or jobber and causes of illegality, is published. The law requires a monthly publication of a list of illegal samples found but, since my incumbency of the office, there has never been a sufficient fund to carry this work out and the department has had to depend on occasional publications by trade papers and the daily press; and I wish to add that the press has been very helpful in this regard.

We now have the case before the court. As all court procedure is essentially the same, I will not elaborate on that other than to say the prosecuting attorney of the county in which the prosecution is brought, appears for the department and the chemist making the analysis in question is the principal witness for the state. In case of conviction and payment of fine the law requires the money to be paid to the State Board of Dairy and Food Commission, which I will later explain, and by it paid to the State Treasurer.

Section 6, hereinbefore quoted, brings up the matter of condemnation of food stuff found to be bad. To give clearly the method followed, I will cite a specific instance. Some months ago two of the assistants found 134 quarters of beef in cold storage, the appearance and smell of which aroused their suspicion. The meat was in a freezing room but did not appear to be firm, besides there was an odor attached to it that reminded them strongly of a morgue. As in the case of all suspected food stuffs, notices were given the cold storage people and the owner not to remove the meat until further notice by the department. Samples were taken to a bacteriologist but found very low in bacteria, so low that the bacteriologist advised chemical analysis. Samples were again taken and the presence of preservatives detected. An application was made to the superior court, setting forth the facts as to amount of stuff seized, owner, date and findings of bacteriologist and chemist and asking for an order to destroy the meat. Ten days' notice was served on the cold storage people and owners advising them of all facts and setting date for hearing. The department was sustained at the hearing and an order obtained to dispose of the meat for purposes other than food. The meat was turned over to a fertilizer plant and watched by the department until its destruction. I might add that some ten or twelve days after the meat was taken to the fertilizer plant it still had no odor besides the embalmed smell, after being meanwhile exposed to the air, sun and some warm rains. We are forced to take but a small percentage of our cases into court. In probably 90 per cent of the cases, when properly explained to them, the owners of the goods in question turn them over to the department for destruction, that he or they turn the property over voluntarily as being unfit for food and to be destroyed, absolving the department from any responsibility. Scarcely a trip is made by the assistants but what some goods are disposed of by the latter method.

The Secretary of State, the Director of the State Agricultural Experiment Station and the Dairy and Food Commissioner from the board of State Dairy and Food Commission, whose duty it is to audit all expense bills incurred by the department. They, as a board, have no voice in the policies of the department, the Commissioner being con-

stituted by statute practically supreme in the conduct of the office. This authority has never, however, been arbitrarily used by the present incumbent but I have on all important questions made it a point to advise fully with the chemists.

One other point in our organization work is the work of the chemists. When food and dairy laws were first passed in this state the chemist of the State Agricultural Experiment Station was constituted State Chemist, which position he still retains. The state legislature in 1909 passed an act specifically providing, in addition to the foregoing, that the Chemist of the State Agricultural Experiment Station at Pullman and the Dean of the School of Pharmacy of the University of Washington be department chemists. These chemists use each the laboratory of their respective institutions and receive no pay other than their regular salaries as professors. They are, however, given an extra assistant by the schools. When called upon to testify in prosecutions instituted by the department, they are entitled to mileage and per diem charged up as part of the costs. If they fail to get this, their expenses are charged up to and paid out of the Commissioner's expense fund.

The Chairman: We now have about nineteen minutes and I will ask Dr. Cutler to open the discussion on this paper for three minutes.

Mr. Cutler: Mr. Chairman, the subject, as I understand, is methods of organization of food control. I believe that that would depend altogether upon the law organizing the department. I could only speak for Missouri in that the food commissioner is alone responsible. He has no consultants. And, therefore, he is responsible alone to the Governor for the conduct of his office. We have a law which is similar to the national law. Identical, in fact, except in matters of administration. We have no referee board. We have no board of food inspection. The circulars of information, as we call them, or regulations, are issued by the commissioner as cases require. The organization consists of the commissioner, two deputies and six inspectors. We have no right to condemn anything. We do condemn things but always with permission of the individual in whose possession the articles needing condemnation rest. For example, at the Masonic Orphans' Home in St. Louis on one occasion some children were made sick from using canned tomatoes. The chemists analyzed the tomatoes and found ammonium sulphate present. After some research work he concluded that the ammonium sulphate was there because the tomatoes were originally rotten before placing them in the can. The jobber had purchased these tomatoes in open market and had his private brand put upon the cans and they were shipped to his warehouse and he sold them. When he discovered that these were decayed tomatoes, I called upon the manager of the concern and stated the case to him and he said, "Well, we believe we can run our business without any interference from the state." I said, "I am very sorry you take that position because under the circumstances it will be necessary to issue a warrant." "Well," he said, "I wish you would see our vice-president." "Very well. I will be glad to see any one who has the interest of this business at heart."

The vice-president was seen in the afternoon and he said, "We have no controversy with you whatever. If the goods are bad, if the chemist has said they are bad, we don't want to sell them; we don't want to be responsible for selling them. What do you want to do with them?" "Well," I said, "I want to destroy them." "If you will allow them to remain in our warehouse," said he, "until we can recover the costs, we would be glad to have it done." I said, "Very well, if you will place them under seal with the condemnation card upon the packages and keep them until you can recover." He said in about two weeks he called upon the packer and demanded his money. We had about a month before that had the packer fined for selling some defective goods. The consequence was that the packer said he did not care to have any more complications with the department and he would be glad to see the money was returned. That is our method of condemnation.

If we go into a drug store, for example, and we find hydrochloric acid, which is black, on the drug, the inspector, who is an expert pharmacist, called attention to the proprietor to the fact that this was imperfect and inert; and he said, "Very well, you can destroy it, then." The consequence was we had no difficulty in that way. The alternative, of course, if they refuse to permit the stuff to be condemned, would be a warrant with the resulting publicity, which they always desire to avoid. That is the method in Missouri of condemning food and the consequence is we have very little trouble in securing condemnation.

The Chairman: Any further discussion of this paper?

Mr. Jones: Mr. Chairman, this is a very important fea-

ture of our discussions—food organization and control. I think that more depends upon it, perhaps, than any other part of our work. The food commissioner, after he organizes his department, should always get in touch with all the different organizations that can assist him—the mayors of cities, the boards of health, the state board of health and all the women's clubs. In Illinois they are of the greatest importance outside of the newspapers. The press is first. The commissioner cannot do anything unless he has the press with him. That is an impossibility. And the first thing he wants the press to know is that he has placed the women up in a niche in the gallery of the famous ones, so they can do things and help him; and they do do that, too, in Illinois, and I am satisfied from what I have heard here they do it in every other state. We could not get along without the newspapers, and the representatives of the press are always ready to hear a story, especially if it is a little sensational, and we have no trouble at all for we have many sensational ones. I will not be able in the short time of five minutes to tell you some of them. And the ladies will come in and they will invite you out and you go and put on your dress suit and you address them and you have a real nice time and they will help you very materially. They will tell you what they are going to do. And they do do a great deal. But don't imagine always they are going to do all they promise. They mean well but they have so many other duties to perform that they cannot perform their other duties and do that also. Well, now, after that is all done, the next thing is to enlighten and educate the courts. In Illinois the first thing I did was to present every state's attorney, every one that is in control of the enforcement of laws, a copy of my annual report, and along with it a nice letter saying to them, "I have spent a year on that and if you will spend an hour reading it, I will be obliged to you; you ought to give me at least an hour." It will help you once in a while if you will address a judge that way, and when you address the president of a woman's club you might, say, give them two hours and by the time you get through you will find you have got pretty good co-operation. We have been talking about co-operation. That is the way to co-operate. And we meet with the mayors of our state. The mayors of our state are organized and have a splendid organization. In fact, all these are organized right up, you might say, to perfection. You will find the manufacturers, the packers and the retailers will organize and you want to get in touch with them. Give them to understand that your department is there ready not only to give them a fair deal, but to protect the consumers. If you do that, you will have a great deal of help. Back of all of it must stand the strong arm of the law and you have got to depend upon the judge. We have got him pretty well educated in Illinois. There is not a judge in Illinois but what I pretty nearly know personally, and when we go into court we want him to understand we are not there except to protect the consumers. We are slow about getting into court, but when we get there we are on business and we fight it out on that line. When you do that, you have got an efficient organization. This other work of how you take the samples and all that sort of thing is a part of the work, but the first thing you have got to do is to educate the different organizations, let them know what you are doing and how you are doing it and all that, and take them into your confidence; and you can only do that where you furnish them your reports and go through with them about your work.

Mr. Judd of Oregon: May I ask you, of all these people, judges, newspaper people, press and women's clubs, do you ever succeed in educating women's clubs?

Mr. Jones: Oh, we do, yes, but not as well as we would like to.

The Chairman: I will say that the next paper is by the Hon. J. W. Bailey of Oregon, and I presume his assistant will read the paper. Do you have the paper?

Mr. Judd of Oregon: No, Mr. Chairman, I have not. That particular question has been very ably discussed. I think we better talk about something else.

The Chairman: We all understand Dr. Ladd read the first paper and then came Commissioner Wallis of Idaho; so that that subject has been well taken up and disposed of. We have saved a little time on our schedule. The next on the program is "Mutuality of All Dairy Interests," by Professor George M. Whitaker of the University of the District of Columbia, ten minutes.

Mr. Whitaker: Mr. President, and gentlemen, knowing that the time is so short I have gotten up my paper under five headings that I may amplify more at length and I will read those and you can imagine the rest.

First, a certain amount of milk is produced every year, calling for a certain number of dairy cows.

Second, this milk is disposed of as marketable milk in the manufacture of butter, in the manufacture of cheese, in the preparation of condensed milk and in other ways.

Third, natural laws of business regulate the amount of milk flowing into these different channels and prices are adjusted in accordance with the supply and demand.

Fourth, an abnormal condition which besets this natural division of products will injure all.

Fifth, the improvement of this.

Imagine, for instance, the use of cheese for any reason to be generally abandoned and the raw material, the milk, which now is going into cheese, to be diverted into market milk or for the production of butter. It would be very easy to see that the milk market would be upset or the market for butter would be upset.

As a matter of fact, we know that a protracted drought which curtails the market milk supplies of large sections of the country and leaves the city dealers to go out to the butter factories and to the cheese factory for their supply of city milk will reduce the amount of butter or cheese. That is a matter of fact. And will have a disturbing influence on the butter or cheese market.

Similarly, any imitation or counterfeit of any dairy product which interferes with the legitimate demand for that product will divert the raw material into other products and will, therefore, upset and injure the market for those products.

So that these five points lead up to this thought, that the oleomargarine business, so far as it injures the butter business diverts more or less of the milk product that otherwise would go into butter and, indirectly, injures the cheese manufacturer, the milk dealer and the vender of dairy cows. In other words, all of the dairy interests are in one body and anything that injures one, injures all of them.

The Chairman: We will now have a paper from Attorney McKinley which should have come up, I believe, before the section of jurisprudence; but we are going to take it up here. Is that correct?

Mr. McKinley: That is agreeable. I want to say that after the program for the section was made up and about three weeks before this convention, we were exceedingly busy in Illinois in prosecuting a large number of oleomargarine cases and in prosecuting a number of cases under our preservative act. The cases took so much time that I was unable to prepare my paper. The principal question that came up was that of distilled and molasses vinegar. A firm there was proposing to put out a form of distilled vinegar, a compound of distilled and molasses vinegar and send it to the trade under that name. We have found by an investigation that there are practically but two vinegars, cider vinegar and distilled vinegar; that everything practically was sold under those two names in our trade there.

We have a statute in Illinois which forbids selling of distilled vinegar in imitation of cider vinegar. I think there are similar provisions in other states which forbid the sale of distilled vinegar to imitate cider vinegar. We have considered that any vinegar that was from the residue of molasses was practically an imitation of cider vinegar and have forbidden its sale. One large manufacturer there took the question up with us and we submitted the matter to the Attorney General. The matter was argued first orally and then by brief and the preparation of that matter took up my time for the better part of several weeks. As I think the matter is of sufficient importance, with the consent of the meeting I will read what I submitted to the Attorney General.

**MEMORANDUM TO SUPPLEMENT LETTER OF A.
H. JONES, STATE FOOD COMMISSIONER, TO
ATTORNEY GENERAL STEAD, IN RE-
GARD TO VINEGAR MADE FROM
MOLASSES STOCK.**

By Charles F. McKinley.

The vinegar in question is branded and sold as a "Compound of Distilled and Molasses Vinegar."

Dr. Bryan, the State Analyst, defines it as a vinegar containing the legal percentage of acetic acid made from molasses the larger portion of the vinegar having at one period of its manufacture been subjected to a process of distillation (the portion which was distilled was a colorless water-white liquid and the portion not distilled, made from the molasses, had a high amber color, which resulted in the final product being of the same color as cider vinegar), the same being a compound of molasses and distilled vinegar.

It is assumed that no other material than molasses is used in the manufacture of this vinegar, the color being obtained

from the portion of the molasses stock used which is not subjected to distillation.

The question on which an opinion is asked is this: Is this vinegar made in violation of the following clause in Section 11 of the Illinois food law—"All vinegar made wholly or in part from distilled liquor shall be branded 'distilled vinegar' and shall not be colored in imitation of cider vinegar." In other words, is this vinegar colored in imitation of cider vinegar?

Before proceeding further I deem it essential to outline briefly the manner of making distilled vinegar.

In making vinegar from molasses, it is first necessary to produce alcoholic fermentation. The molasses stock, which may be a straight molasses, but more often is the residue from sugar factories known as "black strap" is diluted with water, and is then subjected to fermentation with the aid of yeast. The result is a mash composed of dilute alcohol, sugars and other substances, and is the color of very dark molasses. By subjecting this to distillation, the alcohol is freed from the solids and color. If this alcohol is run



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through the generator, the result is a distilled vinegar, a colorless water-white liquid.

A generator is a large tank or barrel about fifteen feet in height and six feet in diameter, set on its end. It is filled with beech shavings which are saturated with old vinegar. The liquor is introduced at the top, and allowed to percolate through the shavings. There are small perforations at the bottom of the generator to allow the vinegar to run off, and permit a current of air to pass through the generator. Through the agency of bacteria, the alcohol is converted into acetic acid while passing through the generator.

One manufacturer gives the following formula for producing the vinegar in question:

"We take our final molasses and ferment it to the alcoholic stage. This is then put into a still and boiled sufficiently to vaporize the water and alcohol. Nothing comes out of the worm of the still except chemically pure 25 per cent alcohol. We are not allowed to make a stronger alcohol than this as it would require us to pay the Internal Revenue tax. All the impurities that were in the molasses remain in the still. They are dumped out and used for other purposes. The 25 per cent chemically pure alcohol which we obtained is next put through vinegar generators which are barrels some six

feet in diameter and 25 feet long, filled with beech shavings. The alcohol is sprayed into these barrels and in passing through them undergoes the acetic fermentation, that is, it comes from the barrel a chemically pure vinegar. Such vinegar is as clear as water and we sell it as 'pure Distilled vinegar.

"To produce the colored vinegar we do not use any coloring matter. We simply compound this pure distilled vinegar with a certain amount of pure fermented vinegar and it gives us a colored vinegar without coloring matter, but chemically pure."

It will be observed that in this formula, "to produce the colored vinegar," a distilled *vinegar* is mixed with fermented *vinegar*. This distilled vinegar is a completed vinegar in itself. The proportions of distilled and fermented vinegar used, are not given. This is an important point.

Another manufacturer gives the following formula:

"A high grade molasses is diluted with water, cooked to boiling temperature and allowed to settle. The impurities are thus eliminated, and with the aid of clarifiers, the molasses is freed from all foreign substance, as far as possible. The diluted molasses is put into the fermenters, and with the aid of yeast, the fermentation of the molasses is started and completed. In the presence of fermentation, the sugar is broken down to alcohol and carbonic acid gas. Part of this fermented mash is allowed to run over the stills to extract the alcohol. This alcohol is then added to the balance of the fermented molasses mash, and to this mixture is added some vinegar (made the previous day), and the entire mixture is then run over generators for acetic fermentation. The acetic fermentation is brought about by bacteria. Without this bacteria vinegar could not be produced. The bacteria can only exist in a solution which will permit them to live, and must be provided with proper nourishment. Bacteria cannot survive long in alcohol. In this mixture of an alcoholic solution and vinegar, the bacteria can live, and it is then necessary to provide them with food. The food is provided by the fermented molasses mash. This molasses mash contains everything that is necessary as food for the acetic bacteria. It contains some sugar and inorganic salts, and nitrogenous substances. Molasses, which is the basic substance of this vinegar, contains, as one of its natural constituents, caramel. The caramel remains in the fermented molasses mash. It is this caramel which gives color to the finished product, to wit, vinegar."

It will be observed in this formula, the manufacturer claims that the distilled liquor, which is a dilute alcohol, is mixed with the balance of the fermented mash, and then run through the generator. It is claimed that in this process, about 65 per cent of the fermented mash is distilled, leaving about 35 per cent containing the molasses solids, to be run through the generator in that condition.

It is contended by all the manufacturers that the amount of the fermented mash or vinegar mixed with the distilled liquor or vinegar, is a substantial part of the whole material used.

These formulæ will be discussed later on.

The food control officials in most of the states, and the United States Department of Agriculture, have ruled that the term "vinegar," when used without any qualifications, means cider vinegar, made from apples. This ruling has been sustained by the courts, and has been enacted into law in some of the states.

Cider vinegar is generally made commercially by passing fermented cider through a generator, thus causing an acetous fermentation which produces the acetic acid, which is the sour principle in all vinegar. Under Section 11 of the food law, all vinegar must contain a minimum of 4 per cent of acetic acid.

Under the food law and the standards adopted in this state, nothing may be added to or taken from the cider, in the production of genuine cider vinegar. Cider vinegar has a familiar, distinctive color, due to the oxidation of the apple solids in the cider. This color, as well as the aroma and flavor of the apple, are retained after passing through the generator. These qualities give to cider vinegar a special value to those who prefer that kind of vinegar.

Distilled vinegar may be made from molasses, corn, grain and other substances containing starches or sugars. If properly made, it is pure and wholesome, and is especially valuable for pickling and preserving purposes. Under the provision in Section 11, it would manifestly be illegal to mix with distilled vinegar, caramel, boiled cider or other similar substances; because both the purpose and the result would be to color it in imitation of cider vinegar.

Those who wish a cider vinegar as well as those who wish a distilled vinegar, should receive what they ask for, and not be imposed upon by being given a false product colored

in imitation of the genuine. There is also a substantial difference in price of cider vinegar over distilled vinegars; and the opportunity for fraud, in the sale of these distilled vinegars for cider vinegar, caused the Legislature of Illinois to enact the provision in question. A number of other states have similar provisions.

Now as to the vinegar in question, called a "compound of distilled and molasses vinegar," it is to be noted in the first place, that as marketed at present it has the same color as cider vinegar. In all the formulæ obtainable, the major portion of the molasses is distilled, thereby eliminating the major part of the molasses solids and color. Nevertheless the finished product retains some of the taste and smell of molasses, which instead of enhancing its qualities, is rather a detriment.

I think this general outline presents a view of the situation now confronting the commissioner for his determination. Of course it involves somewhat a question of fact, which I shall discuss further on.

Coming now to the question on which an opinion has been asked, it seems to me that the foregoing outline suggests for consideration two propositions.

First. Is a vinegar which is made wholly from molasses as a base, illegal, if in the process of its production, fermented mash or vinegar is mixed with distilled liquor or vinegar, thereby giving to the finished product the color of cider vinegar?

Second. If a vinegar is made wholly from a molasses base, and in the process of its production fermented mash or vinegar is mixed with distilled mash or vinegar, giving to the finished product the color of cider vinegar, and it be conceded that the color is the necessary result from the molasses solids in the undistilled portion used, is not such a vinegar colored in imitation of cider vinegar, if it should appear, (a) that the materials or process had been manipulated so as to produce the same color as cider vinegar, or (b) that the amount of fermented mash or vinegar used was not a substantial portion of the whole material?

It will be observed that any extended or analytical discussion of the first proposition leads to a consideration of the second one; and to that extent the question propounded by the Commissioner is broadened.

In taking up the first proposition, I wish to consider the matter without reference to questions of manipulation, or specific proportions of distilled liquor and fermented mash used.

It is our opinion and contention, that the vinegar in question is the result of an effort to produce a vinegar having the color of cider vinegar without adding "artificial coloring." It is the contention of the manufacturers that this vinegar is not colored in imitation of cider vinegar, because the color comes from the molasses of which it is made.

A. This vinegar in its finished state has the same color as cider vinegar, namely, a light amber shade which is a distinctive characteristic of cider vinegar. As noted above, most of this vinegar is made from black strap, which, as its name implies, is of a very dark color. While this fact alone may not be sufficient to make the vinegar illegal, it shows that it comes within that class of vinegars which can easily be sold for cider vinegar, and hence within the purview of the reason for the law.

Now what does the phrase, "colored in imitation of cider vinegar," mean? In construing this phrase, its object must be kept in view, namely, the prevention of the sale for cider vinegar, of a spurious vinegar which looks like cider vinegar. It is likewise necessary to bear in mind the color of the molasses stock from which this vinegar is made. Now with these ideas in mind, let us consider the above phrase.

While coloring may ordinarily be produced by the addition of matter which will give the desired color or shade, I contend that the word "colored" has a broader meaning in this connection. I submit, that as used in this law, it means to produce or effect a color, without reference to whether it is done by adding or eliminating material. The words "colored," and "in imitation," must be taken together to get the full meaning. It is not the coloring that is forbidden, but the coloring in imitation of another article. It is not natural and reasonable to say that one article is colored in imitation of another, if part of the material or color of the first is removed, so as to produce or effect the same color as the second. In other words, cannot an article be colored to imitate by elimination as well as by addition of material.

In the vinegar in question, a large part of the molasses solids which produce the color, are removed. Without discussing the amount removed, it is sufficient to say that the residue gives to the final product the exact color of cider vinegar. Obviously, if a greater portion of all the molasses solids were used it would produce a much darker color, and not

one like cider vinegar. By this method of elimination a certain color is produced, which is not the color the material would give if the greater portion of all of it were used, and hence is colored in imitation of cider vinegar.

As pointed out previously, the aroma and flavor of cider vinegar are the qualities that make it desirable. With the so-called molasses vinegars this is not true; for if it were, why is the greater part of the solids eliminated? And if they can be eliminated without detracting from the value of the vinegar, is not the resulting color the end sought in mixing the fermented mash containing the solids and color with the distilled portion?

In the process outlined previously, it is to be observed that the distilled liquor to which the fermented mash is added, is a dilute alcohol. For the purpose of making vinegar, this alcohol does not differ from that produced from corn, grain or other substances; in other words, by the process of distillation it has lost molasses characteristics, and is just a plain dilute alcohol.

The process, therefore, simply amounts to this: a certain amount of fermented mash made from molasses stock is added to dilute alcohol before being run through the generator. It is true that both may be produced from molasses stock; but since the molasses characteristics in the final product are not the desired elements, while the resulting cider color is the desirable quality, we contend that there is a conscious attempt to imitate cider vinegar.

In the practical processes of manufacture, this alcohol could be produced from various materials, which for the purpose of converting into vinegar would be practically the same, and then enough of the fermented molasses mash could be added to give the required color. This illustrates forcibly the object the Legislature had in view when they enacted this provision of the Food Law.

In support of the above contentions, I quote the following from the case of *Meyer vs. State*, 134 Wis. 156 (see page 164):

"One of the contentions of the plaintiffs in error is: The court erred in instructing the jury, that, although the color of Exhibit A was produced solely by its ingredients they were to consider the claim made by the state that the ingredients were so selected and used in the manufacture of oleomargarine sold, in such manner and in such quantities and proportions as to produce the oleomargarine so sold which was then and there in imitation of yellow butter. The question whether the article sold by the defendants is the identical thing which is contraband by statute must be determined by the testimony of witnesses who have seen it, or by the testimony of witnesses, aided by an inspection of the article itself, and its resemblance to yellow butter is a factor in such determination. If the article is in imitation of yellow butter, it matters not whether such imitation is brought about by the addition of a dye or by the selection of ingredients. Color is the impression given to the eye by lines of light of various rates of vibration. The reason for the natural color of bodies is a different subject, and one that is scarcely yet understood. It has perhaps some relation to the molecular or atomic structure of such bodies, but there is no scientific distinction so far as producing color is concerned between imitating or producing color by the addition of an ingredient known as a dye and added for the purpose alone of producing a given color and the selection and addition of an ingredient which performs the same coloring function but at the same time adds other qualities to the compound. The words 'which imply a conscious imitation of,' used in describing the contraband compound, imply a conscious imitation in the manufacture thereof. If one forming a compound of several ingredients knowingly select and use an ingredient which imparts to the compound the color of yellow butter, he having choice of ingredients, he will have made his compound in imitation of yellow butter just as well as if he selected a dye. There is, however, this difference, viz., proof of the presence of the dye, which can have no other function than that of producing color, shows the conscious imitation quite clearly, while proof of the selection of the ingredients which produced the color of yellow butter, the person selecting having a choice of ingredients, is a fact from which the jury is authorized to infer a conscious imitation notwithstanding such ingredient so selected has other qualities or is in one of its forms or in one of its colors a necessary ingredient of oleomargarine. Whether or not the article in question is in imitation of yellow butter cannot be determined alone by its resemblance to yellow butter, but resemblance aided by evidence of the existence of a dye as one of its ingredients, or resemblance aided by evidence of the existence of available necessary ingredients which will not impart to the compound the color of yellow butter and of the existence of other

available ingredients which will impart to the compound the color of yellow butter, may be considered by the jury as establishing or tending to establish conscious imitation by selection of ingredients. What is yellow butter and whether the article in question is in imitation of yellow butter are questions of fact."

In discussing this first proposition, I have assumed that the vinegar in question is made substantially as given in the formulæ above; and naturally your decision on this proposition will have to be based on the same assumption.

However, recent experiments and observation have led us to doubt the correctness of the formulæ and processes given by the manufacturers; and while we do not expect you to pass upon the facts, and determine the truth of the several contentions, we ask you to assume that the statements which follow are true, and base your decision accordingly.

SECOND PROPOSITION.

As to the exact formulæ and processes which are in fact followed by the manufacturers, we are not yet in a position to state with positiveness. While stating that they have nothing to conceal, manufacturers of this vinegar have been loath to permit our chemists to examine and follow their processes. However, from the examination and observation they have been able to make, together with the results of experiments conducted in our own laboratory, the chemists of the department have arrived at the following conclusions:

A. That the amount of fermented mash or vinegar which is mixed with the distilled liquor or vinegar, it not a substantial part of the whole material; but on the contrary the fermented portion is less than 10 per cent of the whole mixture. That the results of experiments with authentic samples, procured from factories at different stages in the presence of manufacture, indicate that about 5 per cent of fermented mash or vinegar is used to about 95 per cent of the distilled portion.

B. That the distilled liquor is converted into vinegar separately, while the fermented portion is likewise separately converted into vinegar. The two vinegars are then mixed in the proportions given above. This method would under some conditions be easier and more economical than mixing before being run through the generator.

Taking this view of the process of manufacture, we do not believe it is necessary to add very much to what has already been said.

If but 5 per cent or 10 per cent of the fermented portion which contains the color is included in the mixture, we submit it is clearly a case of using it to color the vinegar. It is evident that only enough is used to produce the cider color. This is a manipulation of the ingredients so as to produce the particular color desired; and is a deliberate selection of such ingredients, and in such proportions, as will produce the exact color of cider vinegar.

If the mixture is made after both ingredients are reduced to vinegar, it is likewise plainly a case of coloring, since the distilled vinegar is already a completed vinegar, while the fermented vinegar is a very dark liquid containing a large part of the molasses solids, and wholly unpalatable and unfit for food unless filtered.

The following authorities sustain the above contentions in our opinion: *People vs. Gerad*, 145 N. Y., 105; *People vs. Niagara Fruit Co.*, 75 App. Div. N. Y., 11; *Ibid*, 175 N. Y., 629; *Welles vs. State*, 53 Ohio St., 77; *State vs. Earl*, 152 Mo. App., 235; *St. Louis vs. Polinsky*, 190 Mo., 516.

This memorandum is merely an outline of our contentions. I refrain from any argument. I trust it will assist you to a proper solution of the Commissioner's inquiry.

I therefore respectfully submit, that considering this vinegar under the propositions I have outlined, it is colored in imitation of cider vinegar and cannot be legally sold in Illinois, no matter how it is branded or labeled.

The Chairman: We will now have a paper from Commissioner Flanders of New York.

Mr. Flanders: Mr. Chairman, owing to the lateness of the hour and the much more work you have got to do, I suggest you pass my paper.

The Chairman: Go ahead and read it.

Mr. Flanders: I think that the subject is one that I could not do justice to in five minutes hardly and if you will—

The Chairman: We will give you ten minutes.

Mr. Flanders: If it is agreeable to the house, I would ask you to pass it now and take up the rest of the program.

The Chairman: We are through with all of it now except the miscellaneous business and the election of officers.

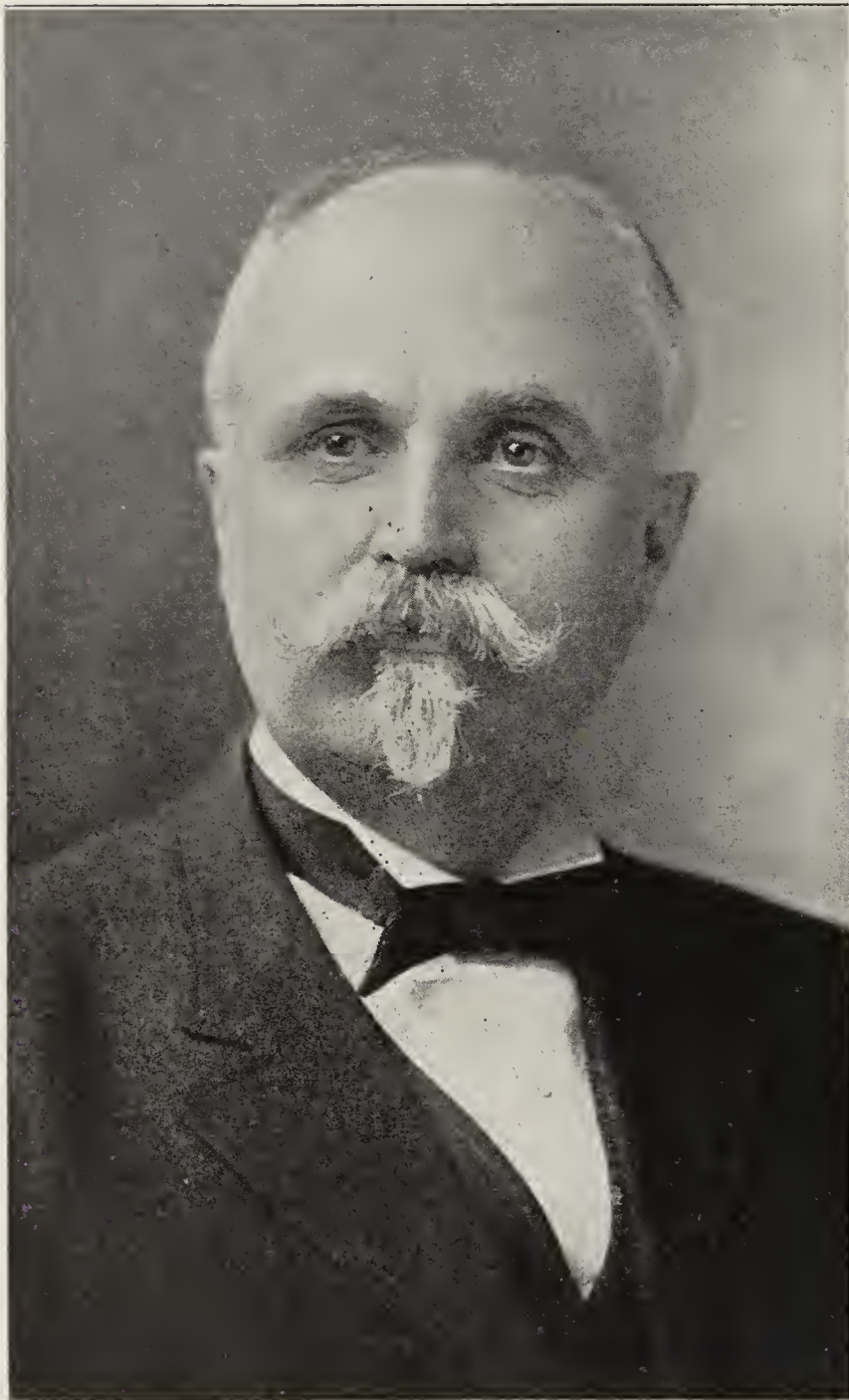
Mr. Flanders: I have left my paper at the hotel, but I can give it to you.

The Chairman: Well, then, give it to us. Go ahead.

Mr. Flanders: Mr. Chairman, I have not a written paper even. The Saturday before I started I received a copy of the program and found myself on the program without time to write it out at length and I thought I would make it lengthy enough, however, when I had time. And I prepared a brief and I thought I brought it with me here this morning. Since I got here I prepared a sub-brief after I found I did not have it a few moments ago.

Police power is a power inherent within the state to pass laws to protect the health, lives and morals of the people. Were I to undertake to define it any further, I would get into the same difficulty that some of our scientific people would get if they undertook to define the difference between animal and vegetable life. But, at least, it covers that ground.

The power the United States Government exercises over the food products is the power given in the constitution to the National Government to regulate the commerce between the states, with foreign nations and the Indian tribes. You will bear in mind that the National Government is a government



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of derived powers—it has none except those that are granted to it. The state is a government of powers that are inherent.

Now, the National Government, then, has power to do what? To regulate, not go ahead with it. Simply power to regulate commerce between the states. It is under those powers granted that we seek to regulate commerce in food products and we approach the question in an entirely different standpoint than we do in state governments where they have the inherent power to pass such laws as are necessary to protect the life, health and morals of the people.

Now, I will call your attention to one case just before we had our oleomargarine litigation. The difference in my talking to you as I remember it now, instead of reading from my brief is that I had the dates. I can give you my cases without giving you the dates of the cases and the pages where

they are found. I can give them approximately. But in a case originating in the State of Iowa, I think, entitled *Leasey vs. Hardin*, in which an Illinois man undertook to send whiskey or beer—I believe beer—into the State of Iowa and sell it there. The case was brought because it was sold in violation of the state law and the case was tried and the court held that the goods, being originally in the importer's packages, were not subject to state law. In other words, under the police power of the state, you could not reach out and regulate the interstate commerce where the power had been given it by the National Government and that, therefore, the goods being sold in the original package, the state law of Iowa did not prevail as to the original importer's package. In other words, the right to carry goods into a state carried with it the concomitant right to dispose of those goods when you got them there in the original importer's package, the doctrine being held that when the goods were once broken up and the original package broken so they became commingled with the goods of the state, at that moment they became subject to the laws of the state.

Now, that was the condition of things that confronted us when the oleomargarine question arose and in the State of Massachusetts, where our friend Winkjer comes from—and he was there at that time—original packages of oleomargarine were taken into the state and sold in original packages and it was an imitation of butter; and a suit was brought and it was taken into the Supreme Court of the United States. It was entitled *In re Blumly*. The facts presented to the court for consideration were these: That the importer had gone into the State of Massachusetts and sold oleomargarine, imported and sold it as butter, in violation of the statute. Now, in view of the case of *Leasey vs. Hardin* I quoted a few minutes since, in which it has been held that goods might be taken within a state and sold in the original packages and be sold in that form, it presented a peculiar problem.

At that time Mr. Phillippy, I think, was attorney general of the State of Massachusetts, an able man. I saw Mr. Phillippy before he argued the case and asked him which way he was going to present it. Mr. Winkjer took me up and introduced me to him. And he said: "I am going to try to get the Supreme Court of the United States to reverse its attitude in the case of *Leasey vs. Hardin*; but in the event I fail in that, I am going to ask that court to distinguish between the facts in that case and in this case on the basis that whiskey is whiskey and nobody can say but what this commodity is sold in original packages as butter and that there is fraud in the sale of it."

He went to the Supreme Court with that argument and the court did reverse its holding, that the police power of a state was competent to prevent a counterfeit or a fraud. That is not the exact wording. Of course, I am putting it very briefly. But the sum and substance of it was the police power of a state was competent to stop a fraud or a counterfeit even if it were in the original packages unbroken of the importer. This case was decided, however, by a majority of the court. I think the court stood just one in majority. I have forgotten now who wrote the prevailing opinion. That is another fact I have in my brief.

Shortly after that in the State of Pennsylvania a case was brought against a man by the name of Skallenberger, involving the same question where an importer had carried into the State of Pennsylvania original packages of oleomargarine and sold it in that state. The case was brought and they proved all the facts to the court in the trial, the same as in the other case, except one solitary fact. I would call your attention to this proposition: In presenting your case you want your facts presented carefully and all brought in. They proved that the oleomargarine was brought in in packages and that it was oleomargarine and sold in Pennsylvania and they forgot to show that it was an imitation of butter. That case was tried and it was held in Pennsylvania to be constitutional and it went to the court of last resort and from there to the Supreme Court of the United States. Mr. Justice Packham wrote the prevailing opinion and the court held that the law of Pennsylvania as to this commodity was unconstitutional, holding in accordance with *Leasey vs. Hardin* that the state law could not prohibit the sale in the original packages of the importer. Consternation was in the butter ranks at that time. They said, "Why, the court has reversed itself." The court had not reversed itself. The court had simply held consistently with its former holding that so far as the plain, clean proposition of the laws under the police power of the state interfered with interstate commerce in the original packages, it could not do it except to prevent a fraud or a deception where there was a counterfeit. In a little while this case was understood.

Now, that is the way the case stands now so far as the Supreme Court of the United States is concerned. The police power of the state can stop even now in the original package the sale of a counterfeit or a fraud but where there is nothing of that kind then the original package can be sold at the point of destination within the state.

Now, I find I have overlooked a couple of cases I meant to have spoken of and there are some more recent cases in Pennsylvania and one in Minnesota. The one in Minnesota I have been unable to get hold of. I want to go back for a few moments to some cases we have tried. Prior to these cases, there were two cases tried that illustrate a point well for us to have in mind.

In the State of New York they passed a law in 1884 and in that law they provided as follows: That no person should manufacture for sale, sell or expose for sale any oleaginous stuff made not from pure milk or cream to be used as a substitute for butter. Pennsylvania passed practically, if not identically, the same law and they were both put in the statute about the same time. Litigation followed. In the State of New York an action was brought against one Morris Marks, reported in the Supreme Court reports. Mr. Marks was arrested and convicted under the state laws and it was appealed and the court of the last resort said, "Your law is unconstitutional. Your law forbids the manufacture or sale of any oleaginous substance that is made as an imitation or substitute for butter. It makes no difference whether that oleaginous substance was made by them to deceive. It might be white or green or black, but it would deceive nobody. In the practice of science you might find some perfectly healthy, wholesome substance that would hurt nobody and be a great benefit and yet to bring in an oleaginous substance to take the place of butter is entirely too broad and unconstitutional.

Taking the hint on that proposition, the Legislature of New York passed in the laws of 1885 a law embodying this proposition: That no oleaginous substance shall be sold or offered for sale, an imitation not made from pure milk or cream and made of butter not from the dairy. For twenty-four years we have been working under that law to keep out of our state the manufacture, imitation or semblance of butter, getting our statute in that form under the standpoint of preventing deception or fraud upon the consumer.

Now, the Pennsylvania people have a law like the one referred to in Section 6, Laws of 1884.

A suit was brought against one Power entitled *Commonwealth vs. Power*, I think. The state law of Pennsylvania was upheld by its own courts as constitutional. It was taken to the Supreme Court of the United States and the Supreme Court of the United States said it was constitutional so far as the constitution of the United States was concerned, it may be unconstitutional by the constitutional government under which we were trying the case, but it did not violate any of the terms of the constitution of the United States. Pennsylvania's constitution was not violated according to its own court. So that we stood in the position that as holding the same law in Pennsylvania as constitutional law that was unconstitutional in the state of New York.

Then following that line and the cases I have referred to, we find a measurement, a description of the attitude we now face as to the constitutionality of the laws or the police powers as defined by the courts.

Now, just one more case to refer to. Soon after the case of *Leasey vs. Hardin* was decided, the people who were interested in that went to the Congress of the United States and asked Congress to provide that any whiskey in interstate commerce should become subject to the laws of the state in the same case, and in the same manner as that manufactured in the state, and would not be exempt from the laws of the state by reason of being introduced in the original imported packages. That was passed. Well, of course, it was challenged by the whiskey people as all such measures are and they challenged it on this ground, it was placed on this basis: They said the power to regulate commerce between the states has been given by the constitution to the United States Government. "Now, instead of passing a law to regulate commerce, you have passed a law putting the question back under the control of the state law. Plainly, instead of exercising the power, you have delegated it back on other authority and that is unconstitutional and you cannot do it." You will find this case reported somewhere, I think, in the 145 or 150 United States Supreme Court Reports, entitled, *In re Rucker*.

The Supreme Court listened to the matter and laid down its opinion and in essence it was this, that this law is not a delegating back to the state government the power that is given by the constitution to the United States Government,

but is an exercise of that power, and that the law was constitutional.

Now, following on the heels of that decision, the butter people and consumers took the hint and in preparing our bills in 1901 or 1902 we were very insistent that the first section of the oleomargarine law should read as follows:

"That all articles known as oleomargarine, margarine, butterine, imitation, process or renovated butter or imitation cheese, and any substance in the semblance of butter or cheese not the usual product of the dairy and not made exclusively of pure and unadulterated milk or cream, transported into any state or territory or the District of Columbia, and remaining therein for use, consumption, sale or storage therein, shall, upon the arrival within the limits of such state or territory or the District of Columbia, be subject to the operation and effect of the laws of such state or territory or the District of Columbia, enacted in the exercise of its police powers, to the same extent and in the same manner as though such articles or substances had been produced in such state or territory or the District of Columbia, and shall not be exempt therefrom by reason of being introduced therein in original packages or otherwise."

So that section of the oleomargarine law is from the old oleomargarine law put in in 1901 and 1902 and we are backed up by the case of *In re Rucker* as being constitutional. There will be no question about it. And that part of the oleomargarine law stands unaffected and unassailable and is quite a barrier to the oleomargarine desires.

Now, I have put forth the proposition to about what the litigation has given us. But really in the state of Pennsylvania they have assailed the oleomargarine laws there as I understand it in cases in which an action has been brought because the goods were an imitation similar to butter. The Pennsylvania law forbidding the sale of those goods, that question is today open to the court; and they are selling a sort of butter without containing artificial coloration, getting the color from what they are pleased in their wisdom to call natural ingredients, a very anomalous proposition to my mind—that an artificial product and article purely artificial is natural; but they say the natural ingredients produce the coloration. In Pennsylvania their law has been sustained as being constitutional. In New York the case is on the way to the court of last resort.

In Minnesota they have been trying the case. The commissioner here can tell us if I am correct. I have not been able to get the case. I wrote to Minnesota to get it. It has not been reported even by the reporter, but the newspapers have it and the essence of it was that the law of Minnesota prohibiting the manufacture and sale of imitations similar to butter or tinted yellow was unconstitutional.

You have got these laws, decisions of the Supreme Court of the United States, sustaining the laws so far as the constitution of the United States is concerned, and so far as the question has been decided by the states it has been sustained. You have got the state of Pennsylvania telling you that such a law is constitutional. You have got the state of Minnesota telling you that such a law is constitutional and New York.

Mr. Emery: Wisconsin stating that such a law is constitutional and Iowa stating that such a law is constitutional.

Mr. Flanders: Now, we are presented with this state of facts.

Mr. Emery: May I interrupt you just a moment. You made the distinction there between an imitation of butter, or an imitation of yellow butter and the terms of the Minnesota law of shaded or tint of yellow.

Mr. Flanders: Now, the different words of these sections may have something to do with it. The different constitutions of the different states may have something to do with it and possibly the drift of mind of the particular judge who interprets the law may have something to do with it. Now, mind you, I am not reflecting at all upon the judge, not in the least. No two men of us probably brought face to face with the same question and asked to render a decision would render a decision exactly right; but we have got to face this condition of things and it is not and cannot be uniform so far as I can see. I have briefly stated what I have for you upon this subject without my paper, which is down to the hotel. Are there any questions you want to ask that I have omitted?

The Chairman: I will just state, gentlemen, that this completes our program. Is there any miscellaneous business? If there is not, we are ready to go into the election of officers and then adjourn. What is the pleasure of the Association? Pardon me, Mr. Allen. The Treasurer of this Association has not made his report. We will hear that now.

Mr. Allen: I will say that I had a report in which there were sundry expenses for advertising this Association in the Pennsylvania Food Bulletin and for half-soling a quarter section and for various things and so on, and so on; but all of which Mr. Foust remitted and I have nothing but simply a balance. No funds have actually been received into my hands.

It is getting late and there is not any contest here for officers. Our present chairman has made an excellent section officer. He has arranged an excellent program and taken considerable interest in it. The first Vice-President, Mr. Woods, is not here. The Secretary, Mr. Saunders, is not here; and this is my own personal motion without consulting anybody and which I want to present to the house—that for Chairman of the section the Hon. James Foust of Pennsylvania; for Vice-President, M. E. Jaffa of California; for Secretary, Commissioner Barney of Iowa; for Treasurer, Commissioner Jackson of Rhode Island; and the Executive Committee to remain as it is: Commissioner Jones of Illi-

nois, Commissioner Ladd of North Dakota and Commissioner Potter of Connecticut; and I move the adoption of that and if I can receive a second I think they should be the officers of the section.

Motion duly seconded and carried.

Mr. Jackson: I want to make an announcement if I may. It is a matter of common knowledge that there has been more or less injury during the last few months relative to oleomargarine legislation; and the officers of the National Dairy Union have prepared a bill which at the earliest practicable moment will be introduced into Congress, probably by Congressman Haugen, who has been a friend and who introduced a previous bill of which this is a revised edition. And I arose to give notice of the fact that we have here copies of that bill for the examination of the commissioners and we bespeak your influence and work in behalf of this during the next two months.

A motion to adjourn was made and duly seconded and carried.

Official Proceedings

Section B—Dairy Officials

WEDNESDAY, JULY 10.

2:00 P. M.

The Chairman: Now, we will come to order. It is half past two and we want to make as rapid progress as possible. I have an apology to offer as to the little misunderstanding that has happened as to my acting as chairman of this meeting.

It seems to me that Mr. Cochran of Denver, Colorado, was made secretary of the meeting of this division, and I took the matter up with him as to getting out the program. He, for some reason or other, did not answer my letter, and it ran on for four or five weeks, and the program was somewhat delayed. Then I was taken ill and laid up for ten days or two weeks, so that our program will be wholly informal, and what I have to say will be wholly informal, and I won't weary you with a long talk. I will discuss the manner in which we are conducting the dairy work in Iowa, and, to begin with, I will say that Iowa for a good many years was a beef producing state, and that we paid very little attention to dairying there, other than what dairying was done by parties breeding cattle for the purpose of raising steers for beef.

About ten years ago we began to notice that the fertility of our lands was being reduced by this process, and we began to realize that the time had come when we must take up another work if we wished to preserve the fertility of the lands, and, for the purpose of taking up this work, a number of us got together who were interested in dairying and formulated a plan that has worked out very well here, and it was this:

We did not find that our state institutions were giving dairying very much encouragement in Iowa. Our college in Iowa was overlooking it, and our Dairy Commissioner was giving a good portion of his work to the food work, and those of us that were interested in the dairy work felt that we were getting the worst of it, and we thought out the method of going to the legislature and asking for an appropriation, through the State Dairy Association. I was at that time president of the State Dairy Association and our plan was this, and it worked admirably.

We did not wait till a man was nominated for an office before we asked him what he was going to do for us if he was made a representative or a senator. As soon as he had the bee in his bonnet we tried to get his name and did get it in most cases, and we put our proposition before him, asking him whether he would support it or not. We had a series of letters, three of them. The first letter was a sort of prospectus of what we expected to do, and we asked him whether he would support the measure that we were intending to offer, that is, a measure for the purpose of an appropriation of about \$5,000 a year, to be used in educational work.

Now, we did not speak alone to the representatives and senators, but we asked the candidate for governor whether he would support a proposition of that kind. When the legislature was finally elected we had at least 75 per cent of the senators and representatives of the state that were pledged to

this work, but, knowing as we did, that these pledges are sometimes forgotten, we did not keep away from the different sessions, but when the legislature met we were down there to see that these people made good, and it finally resulted in our getting an appropriation of \$5,000 a year for two years, and with that we started a lot of dairy trains and a lot of educational work.

We hired one man for all the time, or, for the entire year, and another one for part of the time. Then, after putting those people to work, we were very busy ourselves, those that were interested in seeing that the work was properly looked after, and we got a great many interested in the work, and it resulted in a great deal of good. In fact, I challenge any state to show any better results than we have had in the last five years in the uplift in dairying in Iowa.

About two years ago, when the legislature met, I found that the work was going on fairly well, but the Dairy and Food Commission had been handicapped in that it only had two men in this dairy work, whereas some of the other states had had quite a great number, and I asked the legislature—in fact the law was formulated in my office in my department, the Dairy and Food Department—to give us an appropriation, or to enact a law rather, licensing the Babcock test or the operators of the Babcock test. We went before the legislature with a promise that that would result in a revenue of about \$5,000 a year, and it did even better than that. It is going to leave a revenue to the state of at least \$6,000 a year. Our licenses provide that \$2.50 be the fee. The provision is \$2.50 for the operation of the test for the year.

Now, with that money we have put on four more men in this field work that we are doing, two of them being graduates of the Ames School, the agriculture school of the Dairy Department, and two of them experts in the work, and we are working with the college and with the other state institutions there, and with the Dairy Association to great advantage. We are trying to show our people, our dairy men, how they can build up their herds, and one of the things is this:

We are advocating in all cases the careful use of the scales and the Babcock test, and I maintain that by the use of the scales and the Babcock test, and the sorting out of the herds of common cattle in Iowa, that is, what we term native cows, and with a little better care in feed, that we can increase the product fifty pounds per cow per year.

We have one million five hundred thousand cows in Iowa. I am satisfied that there are five hundred thousand of those cows that do not begin to pay for their feed; that there are another five hundred thousand that barely pay for their feed, and that the other five hundred thousand take care of these boarders. Now, we are considering getting rid of the boarders just as fast as possible, and we are doing it by the use of the scales and the Babcock test.

We explain to our people that an increase of fifty pounds of butter fat per cow per year would mean eighteen million dollars per year to the state.

Now, then, we go still farther than that. We maintain that after they have sorted out these cows—say a man has fifteen and he finds ten that are profitable out of the fifteen, and he will hardly find ten—by the use of a pure-bred sire, selected from one of the better breeds, he can make a still further increase of fifty pounds per cow per year, which would mean another eighteen million dollars per year to the state, or approximately eighteen million dollars.

Now, I feel that for all practical purposes the use of the pure-bred sire will bring a herd up to just as great efficiency as to go in and buy a lot of high-priced registered pure bred cows, and we try to explain to our people that an increase of thirty-six million dollars per year in our dairy products in the state would mean a good thing for everybody. We try to explain that the doctor would be benefited by it, that the merchant would be benefited by such an increase, that the man who works on the street would be benefited by such an increase, and that eighteen million dollars can as easily be brought into our state by the increased product as in any other way, and I want to say to you, gentlemen, that it is bearing good fruit. We are finding that our people are taking up this work. I know of one instance where we went into a community and found in one herd that the party had



W. B. BARNEY,
Dairy and Food Commissioner of Iowa.

cows that were making a dollar a piece and other cows that were making him \$65 a piece. He did not know which of his cows were making a profit at all, but he knew that he was making a little something out of his cows. Now, I don't think it is a question whether a man had better milk one cow one year and get \$65 out of it, or milk a cow sixty-five years to make that same money. It does not seem to me that that would be a hard question to decide, and that was practically what he was doing.

Now, I think there is a little in cooperation in this work, and I think it all depends in the way that you get at it, and in the manner that you handle the work. I believe this, that the Commissioners that are interested in this work hardly understand, many of them, the advantages that could come to their different departments by giving more attention to the dairy end of their work, and with those remarks I will close my talk.

I understand that Mr. Rawl is here, but he is not in the room, and Mr. Whitaker of the National Dairy Union has a matter that he wants to bring before the meeting, so I will call upon Mr. Whitaker to say a few words.

Mr. Whitaker: Mr. President and Gentlemen: I have been a member of this Association for a long time, although I have not met with it of late years, and although I have not been eligible for membership, yet I was one of the organizers of it, with the representatives of Massachusetts that met in the meeting at Detroit, when the organization was formed, and those who have been familiar with it know that the organization has been committed for a great many years to the present oleomargarine law, which is now on the statute books, and the food and drug officials have repeatedly endorsed that law and the principles of it.

Now, the law has been in effect for a number of years, and that experience discloses some weak points in the law and also some strong ones. There has been some masses of administrative detail that the Commissioner of Internal Revenue could improve. On the other hand the law has been so very effective that the oleomargarine people themselves are very anxious to make some change in it, so that by a very curious circumstance those two elements got together, those who thought the law was not good enough, and those that thought it was too good, to approve a bill which would remedy, or rather, which would perfect the law, but, of course, the oleomargarine faction was the stronger one, and they prepared a bill which has been known during the last few months as the Lever bill.

The distinctive features of it are that it replaces the color line of the present law; it reduces the tax to a flat one, taking the ten cents off from colored oleomargarine, and it also breaks down the original package feature of the law which is a matter of great importance to you gentlemen who are commissioners.

The present law says that when oleomargarine reaches the borders of a state it is subject to the laws of that state, regardless of whether or not it is in the original package. Every other commodity, when it reaches the borders of a state, is subject to Federal act and is not subject to the state law until the original package is broken, but oleomargarine is an exception.

Now, then, the oleomargarine people wanted to break that down, and they also wanted to provide for half-pound and pound original packages, the result of which would be to nullify to a great extent your state law, that is, that a pound print or a half pound print, if they could have their way, would be exempt from the action of any state law, and could be sold without any hindrance whatever. At the same time, this measure was very seductive, because there was coupled with it the provision that these small original packages shall have revenue strip stamps around them, something like the stamp on cigar boxes, completely sealing them, and the argument was made that that would prevent all fraud and deception.

That was the kind of legislation that we were up against at the beginning of this year. The bill, you will see, was extremely seductive, and it took away a lot of our friends because it promised to do away with all deception, at the same time letting the bars down for a great deal worse condition than exists at the present time.

We were advised that it would be good tactics to do more than to be on the mere defensive, that we would have to do more than be opposers to that bill, that it would be good tactics to become the aggressors. So we prepared a bill originally, and then there was an amendment or revision of it, and the contest got so hard and the approaching campaign so near that the margarine interests did not dare to bring the proposition up to a vote, and they have put it over until next December. Meanwhile the Dairy Union has revised again the bill and has had copies of it printed for circulation so that all persons interested can become familiar with its provisions, and if they see fit, adopt the excellent suggestion of our chairman, Mr. Barney, as to the methods that he adopted relative to that appropriation, that is, during the present campaign to get pledges from as many congressional candidates as possible to favor this bill or the principles of it.

This bill has a few distinctive points that are especially worthy of notice. In the first place, on page 13, the mixture of any butter and oleomargarine is prohibited. Now, there are some of the high grades of oleomargarine which at the present time contain as much as 50 per cent of butter, and the oleomargarine people though telling all the time how unwholesome and how dirty butter is, and how satisfactory their drug is, still use as much as 50 per cent butter in their product in order to get a higher price, and we feel that each article should stand on its merits.

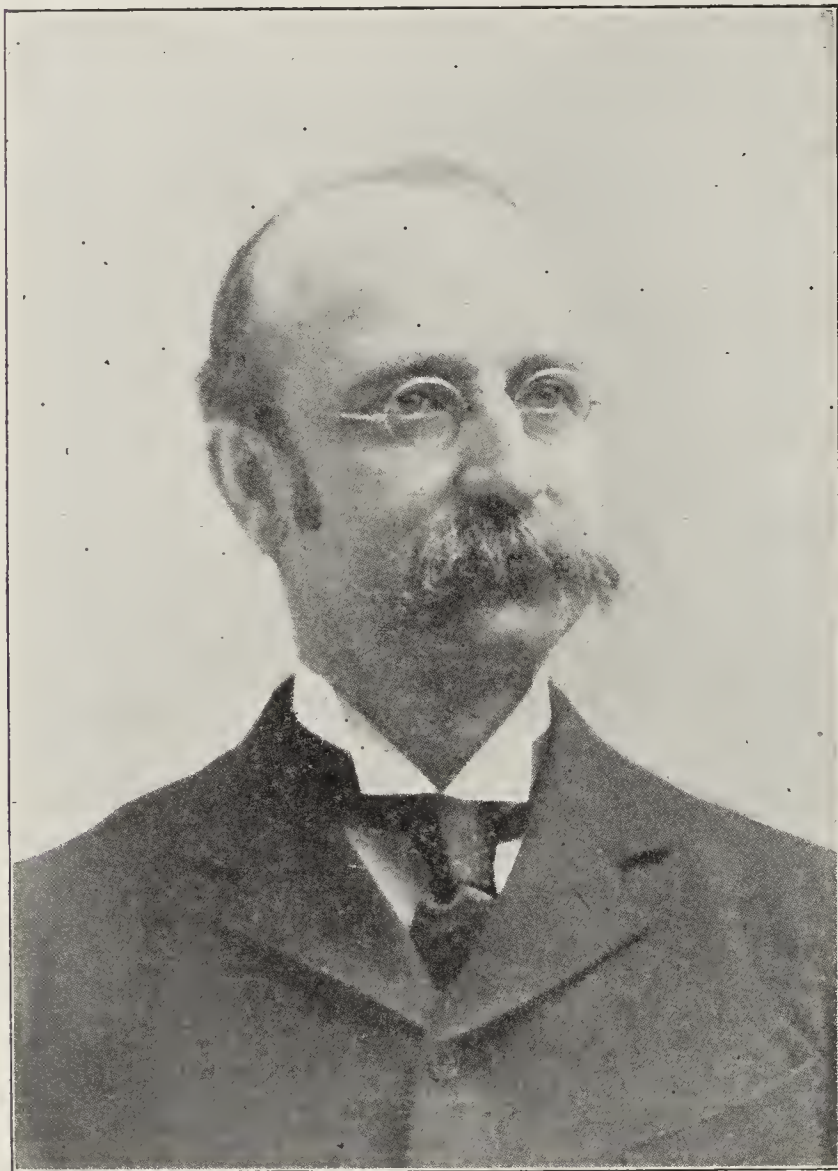
Now, on page 13 of the bill, in the middle of the page, it says, "No margarine shall be manufactured by mixing butter with the same or which contains more than five per cent of milk fat." The oleomargarine people say that it

is absolutely necessary for them to churn their product in milk, so we allow them five per cent of milk fat for the purposes of manufacture, but you will notice that no margarine can be mixed with the butter, or, rather, no butter can be mixed with oleomargarine.

Mr. Hansen of Utah: By this five per cent what is meant? Does that mean five per cent milk?

Mr. Whitaker: Five per cent of fat in the finished product. And then there is another distinctive feature in this bill. The oleomargarine interests have been circulating literature all over the country petitioning the people to oppose the present law on the ground that ten cents tax on the coloring of oleomargarine adds to the cost of living. We all know that it is not so, but it is having effect with a great many organizations, so we propose to give in on that and say that we favor the taking off of this high tax in consideration of a provision that the coloring of oleomargarine in imitation of butter and the mixing of butter and oleomargarine shall be prohibited. That is, in consideration of having a flat one-cent tax.

Now, then, there is a novel and original feature here in connection with this. At the hearings in Washington last



GEORGE M. WHITAKER,
Secretary of the National Dairy Union.

winter the Commissioner of Internal Revenue said it was absolutely impossible to fix a color standard on butter or oleomargarine. We got a number of chemists from the Department of Agriculture, from Mr. Rawl's division, who showed it was possible, and the Bureau of Standards perfected a process of measuring coloring just as a bacteriologist obtains the amount of bacteria. This is a new thing and is not on the market as yet. The bulletins on the subject have not as yet been issued, although they are in the printers' hands, but it is now possible to take any substance of any color to a laboratory and have that color measured. The absolute color itself is first determined according to the wave lengths, and then the tint or shade of the color is determined by the amount of that color, mixed with white, which would be necessary to bring about the desired tint, so that we say here, for the purpose of this act, "margarine shall be deemed to be in such imitation or semblance of butter of any shade of yellow, when it has less than fifty-five per cent of white as determined by the color analyses and measurements of the National Bureau of Standards."

Now, hereafter there will be no need of quibbling over what the interpretation of yellow is. There have been a great many samples tested, and we have determined that fifty-five per cent is about the right color.

Mr. Newman of Illinois: About what color is that?

Mr. Whitaker: It is less color than that (indicating). Of course, a little more than that (indicating).

Now, we have agreed with the oleomargarine people as to changing the name. They wanted it called margarine, and we saw no objection to that. On the other hand, we see a good many advantages on general principles. A three-syllable word is better than a six-syllable word.

Mr. Winkjer of Minnesota: You are in favor of the use of the word "margarine"?

Mr. Whitaker: I am, or rather, we are, in favor of the use of the word "margarine," both because it is simpler than the old word and more easy to pronounce, and it brings the United States in harmony with the customary word in foreign countries.

Then, we have adopted the small package feature of the Lever bill, which would prohibit oleomargarine being put up in any other form except in prints or rolls of from half a pound to five pounds, and which can only be sold with a revenue stamp on it, which would reduce fraud to a considerable extent. The oleomargarine people were right in that, but they went too far in saying it would prevent fraud, and then again, they went too far in wanting to have the color line broken down altogether, so that the bill which we have prepared and which we have presented for your consideration we think comes about as near to being a satisfactory bill as can be produced.

Mr. Hansen of Utah: Just a question on this coloring. We have a lot of stuff in our state that resembles butter a good deal, but which is not butter. What have you to say about that?

Mr. Whitaker: This bill has this to say on page 13, with reference to that—"no margarine shall be manufactured in imitation or semblance of butter of any shade of yellow. For the purpose of this act margarine shall be deemed to be in such imitation or semblance of butter of any shade of yellow, when it has less than fifty-five per cent of white, as determined by the color analyses and measurements of the National Bureau of Standards." So that if oleomargarine is found of a color less than the fixed standard of fifty-five per cent white, by this clause it shall be declared to be an imitation of butter, regardless of how it has been made.

Now, we should be very glad to have you gentlemen endorse this measure, and we would be very glad to have you interest the politicians in your several states in order to get as many representatives committed to its favor as it is possible.

This bill was drawn up after conference with the dairy people and is endorsed by the National Dairy Union; Mr. Walker, president of the American Creamery Butter Manufacturers' Association; Mr. Shilling, secretary of the National Butter Makers' Association; the American Dairy Farmers' Association, and the National Dairy Show Association, and by the National Grange by its Legislative Committee. We have had a great many sessions, working over it, and it has received a very considerable amount of care. We do not believe it to be absolutely perfect yet, but we believe it comes as near to being absolutely perfect as it is possible for us to get.

Mr. Judd of Oregon: This bill that you have here is a newly proposed bill, and not the Lever bill. Is that so?

Mr. Whitaker: It is a bill that we propose as an offset to the Lever bill, and we would like to get it passed if we can. First, however, we want to kill the Lever bill, and in killing that if we can get ours passed, so much the better.

Mr. Newman of Illinois: Mr. Chairman, I move that this division endorse this bill as a division.

The Chairman: Is the motion seconded?

Mr. Judd of Oregon: I second the motion.

Mr. Newman of Illinois: I was going to make another motion, that this department endorse this bill as a division and recommend its adoption by the general convention.

Mr. Winkjer of Minnesota: I second the motion.

The Chairman: You have heard the motion, and it has been seconded. Is there anything to be said on the question? If not, we will take a vote on it. All in favor of it say, "Aye"; contrary, "No." The bill is endorsed by this division.

Now, if there is anyone here that would like to ask Mr. Whitaker any questions with relation to this matter, I presume he will be glad to answer them.

Mr. Newman of Illinois: Having something to do with the work in Chicago, which is probably a city where the

conditions are the worst, I would say that the original package feature of this act is going to make it much easier, and also the fifty-five per cent of white, to protect the consuming public in restaurants, hotels and boarding houses. That is the thing that comes up after it gets away from the original package. A hotel keeper buys it in its original package and he serves it on the table for the public without notifying them what it is, although we have a feature in our law that they should, which we find very hard to enforce, but this color scheme that has been put in the bill will protect the public, and, from our standpoint, we think it is the best yet.

The Chairman: The chair can agree with Mr. Newman in that, and it believes that it will also have a good effect on the grocery man that is trying to sell oleomargarine for butter. That is one of the things that we come in contact with out in Iowa frequently, and I believe when it comes out of the original package, as outlined in this bill, he won't be able to sell oleomargarine for butter.



JOHN B. NEWMAN,
Assistant State Food Commissioner of Illinois.

Mr. Judd of Oregon: I would like to ask if the Dairy Union is making any adequate effort to get the facts before the women clubs throughout the country. Now strange as it may seem, I know of women's clubs, both local and state, who whereas and resolve in favor of oleomargarine. They do not altogether get their inspiration from literature, but the oleo people are a smart class of people, who have plenty of money, and they are used to wearing fancy vests and swallow-tail coats, and that sort of thing, and they are good entertainers, and they go around to the different cities and get acquainted with the women of the different women's clubs, and they intimate that they would be most glad to appear before those clubs and discuss with them, we will say, The Mortality of the Infants in the Old Maids' Class, or something of that kind, and the women hustle around and get their meeting started, saying that Dr. So and So, B. H. T. H., interrogation point, will be with us, and will be glad to meet us, and you may be sure at the meeting the doctor knows how to meet them and knows how to use his soulful eyes to good advantage, and he talks to them and when he gets through he proceeds to discuss

this 10 per cent tax on oleomargarine, and its effect on the high cost of living, and so on.

Mr. Whitaker: I do not want to take too much of your time on this subject, but the speaker has opened up a subject that I can talk about the rest of the afternoon. The oleomargarine interests have been sending out circulars, three different forms of circulars, during the past two years, and they have been signed by Congressman Lever and Congressman Burleson. One of these circulars speaks of the ten cent tax on "this worthy food product," which could be produced at a lower price if it were not for that. Another letter refers to the spread of tuberculosis by means of dairy products and asks the organization to which it is sent to pass a resolution demanding an investigation by congress on the spread of disease to human beings from dairy products—and the repeal of the ten cent tax upon oleomargarine. The third letter speaks of the price of butter, saying it is artificially held up by the existing tax on oleomargarine which helps to increase the cost of living. These letters have been sent to women's clubs, labor unions and other organizations, and upon investigating we found, that although a large number of favorable responses have been received by the oleomargarine interests from these organizations, as might be expected, names or organization had been put on their list that had never passed the resolution at all in favor of oleomargarine, and that although there had been several hundred organizations of women's clubs that had passed the resolution, they were a small number in proportion to the whole. Meanwhile the oleomargarine people have had the newspapers publish many items about the "flood of petitions" which have been sent to congress to repeal the tax on oleomargarine; one paper calling attention to the fact that the consumers have now taken the matter up and are active and aggressive in the demand for the repeal of "this unjust and iniquitous tax."

There are over 6,000 federated clubs in the whole country and of those about eighty petitioned congress to repeal the tax, about 1 1/3 per cent. In Mississippi with sixty-one clubs, in Oklahoma with 205, in Nebraska with 130, not one resolution was adopted. In North Carolina with sixty clubs, one small club of thirty-seven members asked to have the tax removed. Out of 275 clubs in New York State, with a membership of 95,000, one with sixty members passed the resolution sent by the congressman. Out of Missouri's 157 clubs, two passed the resolution, one of these having only eighteen members. Minnesota has 212 clubs with an enrollment of 11,000, and four, numbering seventy-seven, thirty-nine, thirty and thirty-seven, asked to have the tax removed. In Massachusetts, with 244 clubs and a membership of 37,000, three clubs, with a membership of 245, put themselves on record as opposing the present law. One of these clubs had only twenty-five members. This does not show much of a general, spontaneous uprising among the women of the country for the removal of the tax on colored oleomargarine. But to answer your question more directly, I may say that we have been doing our share of the work. Of course, the Union has only got a few thousand dollars in the treasury compared with the immense resources of the beef interests, but we have sent out a number of circulars, one of which is on Color and Its Relation to Food, while another is entitled Two Kinds of Oleomargarine, and then we have sent out a circular as to where the dairy interests stand in relation to Oleomargarine legislation, and we have used a good deal of money for printing and postage in doing something to counteract the interest that has been started by the oleomargarine people, and, while, we can do a great deal more, we feel that we have done some very fairly good work along that line, at least so much so that the oleomargarine people did not dare to bring up the matter in March in congress, although in January they had boasted of it.

The Chairman: I am sure that this has been a very interesting discussion, and that there will be much good come of it, and as our time is short we will have to go on to the other subjects. We will pass over Dr. Rawl's address, as he has asked to be excused for the time being on account of having a paper to read in another division, and I will call upon the Honorable J. G. Winkjer of St. Paul, Minnesota, who has a paper on Creamery Work in connection with the Producer.

Mr. Winkjer of Minnesota: Before starting to read my paper, I want to say just a few words in regard to the oleomargarine matter—the taking away of color in oleomargarine as a protection to the consumer. It has bothered me for a long time to see just exactly the value of this law, and I want to give you the impression that has come to me and which will probably help you a little bit in viewing it from a different phase.

The protection that is given by original packages or by marked packages goes only between those who are buying and selling, while the consumer does not know what he is getting on the table by reason of the fact that the package is removed when he sees it, and therefore color becomes the distinctive mark. I suppose you can see that part of it, but the other part of it, the marking of the packages, is entirely unimportant, as far as the oleomargarine is concerned, because the one that eats it ought to know if it is oleomargarine, and so, by taking away the color to resemble butter, making it a white color, puts it in a distinctive way for the one who eats it.

Now, in regard to my paper. I was in rather a hurry preparing it, and I have not been able to go over it to correct what defects it contains, and therefore I will read it with those defects in it.

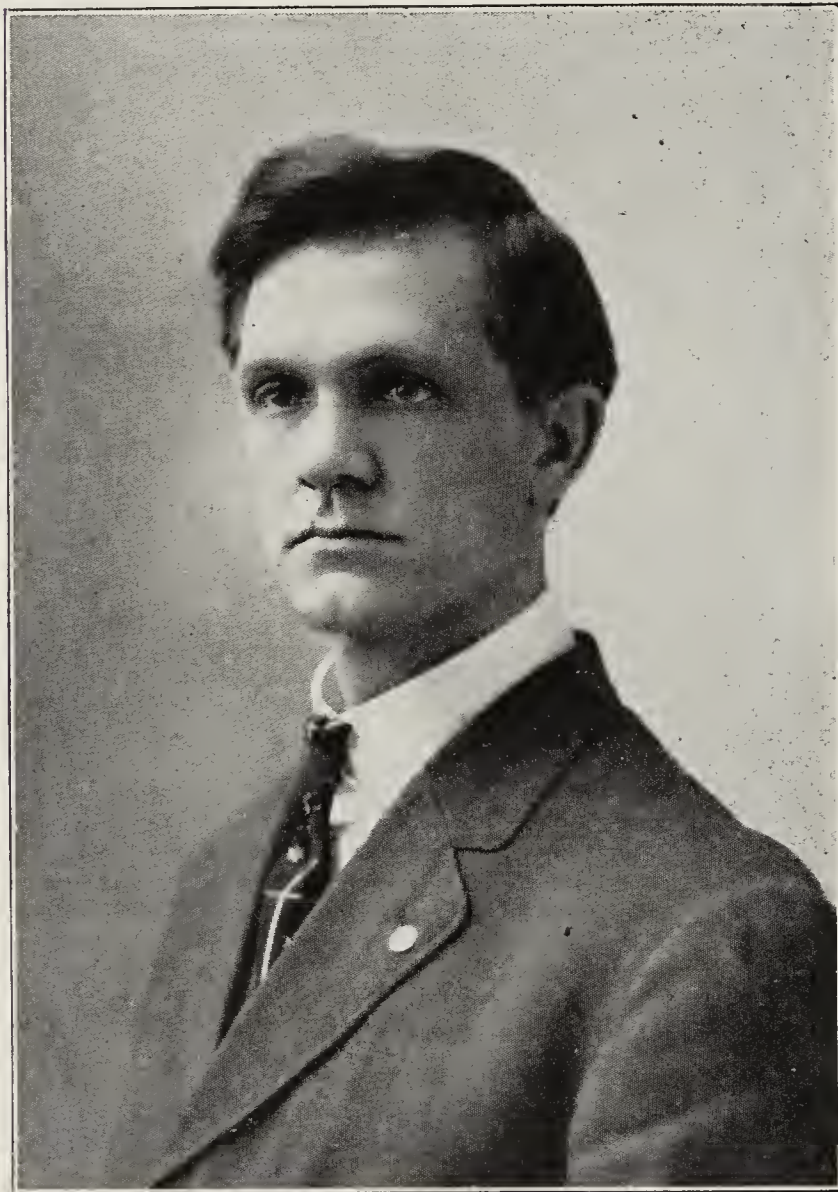
CREAMERY WORK IN CONNECTION WITH THE PRODUCER.

By Joel G. Winkjer.

The manufacture of butter is unquestionably the biggest item in the dairy industry.

The State of Minnesota produces approximately sixty times as much milk for the manufacture of butter as it does for the manufacture of cheese. Wisconsin, the greatest cheese producing state we have in the Union, supplies nearly twice as much milk for the production of butter than it does for cheese.

The city milk supply is undoubtedly a great item but statistical figures are not readily available whereby we can make a comparison with other lines of marketing milk or its prod-



JOEL G. WINKJER,
Dairy and Food Commissioner of Minnesota.

ucts. We know the creamery work in connection with the dairy work is one of great importance for any section of the country that desires to develop the dairy industry. Especially does the importance of this industry loom up when we consider that it is the line of dairying whereby the fertility of the soil can be most readily built up and maintained.

The creamery industry as we find it today is the result of the tendency of the time in the direction of specialization. Less than fifty years ago the term "dairyman" meant a man on the farm, who in connection with other work, milked the

cows, made butter and found a market for the same. Gradually this condition has changed until today we find that the creameries have almost supplanted the old method of farm buttermaking. The change in this line has been gradual. First, the application of the horse as motive power, and large factory churns instead of the small hand churn. The power worker followed only a short time after this. Cream was gathered from the surface of the milk at the different farms and brought to a churning place. This, skimming of the cream from the milk, was a most laborious part of the work and some "crazy man" conceived the idea of separating the cream by a rotary motion of the milk receptacles suspended from a cross-bar on a shaft. From this idea came the present idea of the cream separator and this in connection with the Babcock Test formed one of the greatest factors in the evolution that has separated the making of butter from the dairy work on the farm. Hundreds of other improvements followed in line and the present method finds us where butter can be manufactured more cheaply and give more benefits through the creamery than could be derived from buttermaking on the farm.

Buttermaking in connection with the producer under the old system had many unsatisfactory conditions. With a few exceptions knowledge of the art of buttermaking at that time was very limited and the small merchant to whom the buttermaker sold his goods was equally ignorant as to the requirements for making and sale of good butter. The great number of buttermakers, widely separated both geographically and educationally, were not in a position to learn their trade very rapidly. Even had this objection not been present the fact that this was more of a side line to them and that they were great in number made it practically impossible for them to make any progress in their line of work.

The merchant who bought their butter was prevented by his relation with them to take any steps for improvement. Even if he had knowledge, which was seldom the case, his hands were bound and this prevented him from doing any service to the industry in this line.

There was a very little of this old system that was carried along into the present system of buttermaking in connection with the dairy work. There is one thing, however, that properly needs to be noted and remembered: That is, that the earlier conditions placed buttermaking in connection with dairying in the hands of one man and it was his object to dispose of his butter as the final step in his dairy efforts.

In the transaction period there were many different methods for manufacturing butter out of the raw material and one of these carries with it so many points of merit that I wish to call your attention to this particular system.

The one I refer to is the coöperative creamery. This system carried with it, to some extent, the conditions of the dairyman himself seeking an outlet for the final product of the raw material which he produced. As referred to above this condition existed at a time when the dairyman was his own buttermaker and there is a vast difference between the two systems in their entirities.

In considering the creamery work, which is in other words the buttermaking industry, in connection with the producer of the raw material, there is one factor that is so important that it seems almost like the keystone of an arch; this is the consumer. If there was no consumer of butter there would be no creamery industry and a great part of the dairy industry would be cut off. It is important, not only that the consumer should eat butter but that he should eat a lot of it. Then one of the fundamental facts to be considered in the success of the business is, that the butter be manufactured to suit the consumer, and the closer you can bring the consumer of the butter and the producer of the raw material together, so that the producer can understand the requirements of the consumer, the better it will be for the producer.

When the dairyman was his own buttermaker he had the benefit of the close contact with the selling part of the business, but there still remained so wide a gulf that he could rarely appreciate the wants of the consumer. This gulf, as already hinted to above was the secondary attention that the dairyman gave to buttermaking; the great number of small batches of butter that were made; the ignorance of the merchant that bought the butter and the strongest interest of the merchant to keep the producer as his customer, which interest prevented him from criticising the butter that he bought. The long distance that still remained between the merchant and the consumer placed the producer in a position where he had very little idea as to the requirements that the consumer demanded from him in producing butter that would tickle his palate.

The coöperative creamery, however, fills this want and also corrects a great number of the objectionable features

that existed under the old system. The coöperative creamery has come into existence from the desire of the producer of the raw material to do away with the laborious work of manufacturing the butter on the farm and peddling it out in small quantities. We find, for instance, that the main incentive of the first creamery that was started in Minnesota was this very thing. The farmers themselves commenced to investigate the process of making butter and the conditions required for the successful operation of a creamery; the proper buildings to erect together with the proper machinery for these buildings. They then hired a competent butter-maker to operate the plant. We see then that the making of the butter while not absolutely in the hands of the dairyman was very closely under their control. We find also that they became more closely connected with the consumer through this man hired as a buttermaker. This man was not one that had a half-hearted interest in making the butter but was one who had studied the business for a long time and had made it his life work. He had studied the art of making butter and all the scientific facts that had bearing on the manufacture of this butter. He was well acquainted with the machinery for the making of butter and alert in making improvements for lessening the cost of manufacture. He had not only to know all the things concerning the butter-making business, but he had also to know the relation of the business to the dairyman and so through all these he also got much closer to the requirements of the consumer as to the kind of butter that he desired most.

In the many coöperative creameries that have been developed in my own state, we find that they have developed along the line of this first creamery, retaining the close relation to the producer, which is of so great importance.

Under the old system we find each dairyman making butter almost independent of his fellow dairymen, and in the system of the coöperative creameries we find the patrons in clusters of two or three hundred, producing raw material to bring in to one place for their skilled man to manufacture into the best butter possible. The fact has become very apparent to them that under this system the better butter they make the more returns they could expect to get for the raw material that they produced. This extra income is the greatest incentive, not only for engaging in the business, but for straining every effort in the line of better dairying.

The position that the buttermaker holds in an organized body of this kind, is entirely different from anything else. He is hired by the farmer on account of a demand that has gone entirely from the farmer himself. We still find the condition in Minnesota and in other states where the coöperative creameries prevail, that the buttermakers are the hardest workers for the success of the organization and have the interest of its success at heart equally as great as the farmer himself. In order that the buttermaker may fill his place and make a success of the business that he is engaged in, it is important that he get as close to the consumer as possible, so that he may know the requirements in the way of marketing as well as the quality of the butter that is demanded by the consumer. He has to get very close to the producer of the raw material so that his part of the work can be in harmony with the best interests of the industry as a whole. His position in the creamery brings him in contact with every producer in the territory in which he works and with the skill, ability and training that he has to exert, has a great influence for the better upbuilding of the dairy industry and therefore this system with all these advantages presents a condition that far surpassed every method used in the manufacture of butter in the development of dairying, and places the creamery work in connection with the dairy work in a proper relation.

The only system that approaches this, is the local individual creamery, and they thrive in between the organized coöperative creameries when operated by a competent man. Any other system that does not possess these qualities falls short of the requirements and therefore does not properly fill the place that the creamery should to the producer of the raw material.

We know of the importance the dairyman is to the agricultural districts of our country, and especially are they of importance where the creamery work is carried on in connection with the dairy work. There is no other line of agricultural work that removes so little of the fertility of the soil and returns so much back to it as does the creamery industry. Even comparing creamery work with other lines of dairying this fact holds true. Remember that the fertility of the soil is the basis of all the wealth of the agricultural districts, and then we see how important it becomes to carry on the proper method of creamery work in connection with dairying and the interest that it should create, not only

among dairymen and dairy officials, but among all those who are interested in preserving and developing the resources of our country. (Applause.)

Mr. Judd of Oregon: What the gentleman of Minnesota says about coöperative creameries appeals to me more than I can say, but I think that we need to go just a little bit further. Coöperative creameries have certain weaknesses which, until they are eliminated, are bound to cause them trouble, more or less, and principally more, which frequently makes them fall an easy prey. In fact, I cannot see how the coöperative creamery or the small proprietary creamery can keep along pursuing the same methods that they do now. Now, I think I can tell within two or three minutes the way that it seems to me a coöperative or small creamery should go about.

Coöperation is all right, but it does not go far enough. There is a community, say, that either is just beginning to go into the dairying business and have no creamery, or else have been sending their cream to some large creamery some distance away, and they decide to take the matter of a coöperative creamery over, and some man who wants to sell them an outfit and who wants to get their business, a pretty good booster and a pretty good talker, comes along, and the result is they organize a coöperative creamery. There is not a man among them that knows anything about the manufacture of butter and not a man among them knows how to run their creamery. The result is that they have to hire a butter man. Now, those farmers are mighty thrifty and frugal men and the chances are that if there are three buttermakers that apply for the position, one, say, at \$100 per month, another at \$85, and the third at \$75, they will take the \$75 a month man, and then we run across this proposition.

Our office got a letter from some people of this glorious state of Washington—I don't know why they should write to the Oregon office, but they did—saying that they had had some trouble with having their butter made, and they wanted to start a little creamery. Well, they started their creamery, and then we got a letter from them saying that they had got a buttermaker, but that he was not satisfactory. He did not seem to realize that he was hired as a buttermaker and not to run the creamery, as he was doing, and boss the owners, which of course they resented. And that is one point that I want to call your attention to.

Now, after you have got your coöperative creamery organized and you have got your \$75 a month man, another man is needed to attend to the sales end, and that is just as important as the buttermaking end. Those farmers are bright men, financiers some of them, but they are not salesmen, and I want to tell you today that when you have a special product like butter to put on the market, you must have somebody at the handling end of it who knows how to handle that end. It has been the practice of shipping the butter to the commission men in the cities, to whom a commission is paid and who handle the butter in such a way that the farmer gets anywhere from three to five cents less per pound of butter than he should get.

Mr. Winkjer has told us of how these coöperative creameries have turned out better butter and how well their coöperation works, but that is not enough, for this one here and that one there should coöperate with each other and a coöperative society of all should be formed. They should all coöperate with the inspection end in view, and they should employ some man that is a good expert buttermaker and understands cream and creameries and all that sort of thing, to devote all his time to the inspection of creameries, and to whom should be given the power of supervision over the buttermakers, and then they should employ a good sales agent. In that way their butter will bring as much upon the market as its quality deserves. The fact that the cream is all produced close to the creamery and taken to the creamery in good condition, and the fact that the creamery is under the inspection of a live and expert man means that the quality will be that quality that will deserve the best price.

This is not entirely original with me at all. I borrowed it from the Tillamook country in our state of Oregon, of which you have possibly heard. They made cheese there, first in this way, and then in that, and the cheese that they made was sometimes something terrible and sometimes good. They finally got together down there and are using this plan that I have outlined here, and the improvement in the quality of cheese has been something wonderful, and instead of sending their product to the commission men, and having to depend upon them, they have a practical salesman to handle it, and he handles it well, and the people are not yelling for it, praying for it and stand with mouths outstretched to get it. The quality of the cheese has improved so much

that we do not need any more to take our hats off to Wisconsin, for we can make our cheese as good as Wisconsin does, and the first thing you know Wisconsin will be wanting our cheese.

Dr. Cutler of Missouri: In Missouri we have two or three coöperative creameries that are successful, but they are all very small and in German communities. There we find that the centralizer is handling the product as well as in any coöperative creamery, in fact, better than in some cases, and I want to impress the fact upon you that so far as Missouri is concerned coöperative creameries are of too little consequence to be of any benefit to the butter interests. In addition, the centralizers are very valuable agents in the matter of promoting the work for the dairy commissioner, and they employ men who are expert buttermakers and men who are educated in schools and who can talk to the farmer on the question of how to get the best butter and how to make a profit and so on; in fact, all the details, and for that reason they are very much of a help to us.

I presume that one reason why a coöperative creamery has not been a success in Missouri is the fact that the Missouri farmer is a peculiar individual who wants to have his say, and they have rarely got together. It has also been given a black eye by the promoters who have come into the farming districts of Missouri and who have told the farmers tales of immense profits to be made by having a coöperative creamery, and who have persuaded the farmers to give up a few thousand dollars for a second-hand lot of machinery. If I had my say I would pass a law that would prevent any coöperative creamery promotor from ever going into a district. They do more harm to the dairy business than anything that I know of, for they deceive the farmer, and, unfortunately, the farmers are most easily deceived.

Mr. Newman of Illinois: That is an illustration of not the system but the man. You take in the state of Illinois. At one time that state stood highest in the matter of the quality of its butter, but, now, since some of the centralizers have got hold, it does not stand as high. In the meantime the state of Minnesota, where the coöperative creamery has reached its hight of perfection, has carried off the banner in regard to the quality of butter. I will put coöperative butter up against centralizers' butter anywhere and any time.

Mr. Hansen of Utah: We have had the same conditions in Utah. At one time the state was dotted with coöperative creameries, and we found the same condition as in Missouri, that these coöperative dairies were not supported, and the centralizers came in there and offered the skimmed milk back and all these things, and we discovered the same condition as in Illinois, that the grade of our butter had dwindled down. Many of the coöperative creameries closed down and the farmers became discouraged, but, now, with the centralizers' plants offering such a high price in this western country, the farmers are taking heart again and buying better cows and more cows, and going into the business more extensively.

If Dr. Cutler made that kind of a talk in Utah as he has made here today, he would be said to be a member of the butter trust, although there really is no trust in the state of Utah, the several different centralizer plants having no connection with each other.

What we want to do is coöperation amongst the coöperative creameries, and have the dairy men unite and get back to that condition where some good can be done. While traveling in Minnesota and Wisconsin I was served with so good butter in the hotels that I wanted to go and live there, and it put my mind back to fifteen years ago in Utah when we had the same condition.

Mr. Judd of Oregon: There is one thing about the conditions in the Tillamook. They have an organization formed taking in a lot of cheese factories, and one of the things in their constitution is this: That a dairyman becoming dissatisfied with the factory to which he is delivering his milk cannot go to another factory. It may be that the milk is too sour or the dairy man gets angry at that particular factory, but according to the constitution and the by-laws of the organization in this district he cannot take his product to any other factory, but he must send it to this particular one, and if he won't bring his stuff up to the standard or the factory, why, he can leave it at home. They will not take it.

The Chairman: What we have done in the way of coöperation, or in the way of coöperative creameries in Iowa is this: Now, I believe that centralizers are all right in a country that is partially settled. I recall the time when we had in Iowa about 800 creameries, somewhere in that neighborhood and with the centralizers coming in there the quality of our butter went away down and a lot of our creameries

closed up. I think that the number dropped down to 500 creameries in the state. Today we have 575 creameries in operation, and the most successful creameries within our state are the farmers' coöperative creameries. They are paying more money for fat than are the centralizers by about five cents per pound, I think, on an average, and they are able to do so. We feel that it is absolutely the nearest to a right way of getting at this work, and our department is going over the state today and I guess we have organized or helped organize a dozen coöperative creameries within the last year, and we are recommending that our farmers organize their own creameries, and we are making some effort of doing away with this plan of promoted creameries. We have a number of promoters that have been working in the state, and it is my idea that a creamery is a good deal like a silo. You know, any kind of a silo is very much better than no silo at all, and I think that any kind of a creamery is a good deal better than to depend on the centralizer, and we are doing whatever we can to increase the number of creameries in Iowa.

Dr. Cutler of Missouri: Do I understand you to say that it is commonly understood of centralizers that they are a butter trust in that sense?

The Chairman: No.

Dr. Cutler of Missouri: Because the butter trust only controls one creamery in our state and that is at St. Louis. We have sixty-three creameries that make anywhere from 500 to 10,000 pounds of butter a day, but they are centralizers in the sense that they are in Joplin, St. Louis and Kansas City. Then there are some adjacent to milk producing territory, but I would not want it to be supposed that centralizers necessarily make bad butter, because they don't do it, and we have some mighty good butter in Missouri.

Mr. Newman of Illinois: In your state and in some other states I think the pioneer work is done a great deal better, but I do think it reduces the quality of your goods.

Dr. Cutler of Missouri: It is not so with reference to the Ozark Dairy Association, where they have twenty-nine creameries, and their butter has always been successful, and I want to impress the fact that, if it were not for the centralizers, so-called, we would not have any creamery business in Missouri.

Mr. Hansen of Washington: The creamery industry in this state is practically in its infancy, and the problems you gentlemen have brought up are problems that we have to face. The farmers' co-operative creamery is really the foundation of the creamery business in this state, and we have creameries here that have been in operation for fifteen years and have been doing well, and we have also the centralizers, and through the centralizers reaching out, the quality of the butter has been continually breaking down. Now, there is one thing that I would like to speak of, and that is lack of good railroad care of the cream. A lot of cream is brought to the station in cans, and the agent of the railroad sets the cream out in the hot sun and no particular attention is paid to it, and when it spoils the farmer is blamed for it. So, if we had some adequate railroad legislation to force these railroad companies to care for this cream, that would be of great benefit.

Dr. Cutler of Missouri: If the Dairy Commissioner made a complaint against that agent in our state he would be fired. That is the way the railroads are helping us in Missouri.

Mr. Hansen of Utah: The companies in Utah have done the same thing.

Mr. Newman of Illinois: They will in your state, too, for they want that business, and they want the butter after it is made.

Mr. Judd of Oregon: They won't do it of their own volition.

Mr. Hansen of Washington: We made complaints about two years ago, and the railroad companies sent out notices and it had some effect for a time, but after a time no attention was paid to the notices at all.

Dr. Cutler of Missouri: If you make complaints on particular cases, telling who the agent is, they will dismiss the agent.

The Chairman: It is close to four o'clock, at which time I believe we are to go for a ride, and before we close there will be a few words on the subject by Mr. Winkjer.

Mr. Winkjer of Minnesota: The discussion that has been going on here is practically all familiar to me, and also the situation that is mentioned by Dr. Cutler of Missouri and this gentleman over here (referring to Mr. Hansen of Washington), and it would take a very long time for me to discuss all of it. In fact, there are about ten different subjects that would require about an hour each to discuss, but I won't take up that much time. I will go over the matter as rapidly as I can and bring out my thoughts. I will start at the beginning of the discussion.

What was mentioned regarding the organizing of the co-operative creameries and the faults that were found with them are very true, and that exists in every state; that the management is not always very good, that the buttermaker is not always the right one, and all those faults that you can find with co-operative creameries, but the fact still remains that we have got some of the best creameries in the country, which goes to prove that the co-operative creamery does the best work, and the reason why we have come up to that condition is because the state departments have nursed these creameries up to the condition where they are now. There was something mentioned here in connection with that, but I cannot just recall it. We have had in our state creameries that have failed, and failed so miserably that they have left a spot that I do not know when it will be eradicated.

It was my privilege to go over Kansas, Oklahoma, Missouri and Nebraska, and I must say that I did not find a single creamery in those states that was organized on the plan of the Minnesota creamery, or, in other words, that had come about for the reasons that I have stated in this paper.

Now, I want to go back a bit to state that all those creameries that I have referred to as failures, are creameries that were promoted by promoters. They do not come from the farmer himself but are brought about by some glib fellow who comes into a district and talks to him and tells him how much he can make and so on, and who invariably gets the farmer to invest his money in stocks.

The co-operative creamery was conceived in the southern part of Minnesota. One of the farmers had raised wheat there for a number of years and had made some money, and he went back to Denmark, his native land, and found there that the co-operative creamery had been developed. When he came back he talked the matter over with the farmers in his vicinity and they sent a delegation to Iowa and also to Illinois to find out what was necessary to get a co-operative creamery. You see, at the very start, there was the desire of the farmers to get hold of something and they started to get hold of it in a level-headed manner, and the result in Minnesota was that the creamery was organized right, and made a success from the very beginning, and then the idea was taken up by Professor Hickett, who spread it over the state and gave it state's assistance. That is absolutely necessary if it is going to go ahead, the need of state assistance.

Mention has been made of the centralizers. As a trust the centralizer should be condemned, but to that extent of building up the business in the way that Dr. Cutler refers to, the centralizer is useful, but it must be remembered that we never could have gotten these co-operative creameries unless they were nursed by the state. There is not one in Minnesota that is not nursed by the state. The time is too short to continue along that line, but I want to impress this upon you, that the dairying industry, not only in the particular state in which I live, but in every state, to be successful, must have our best thoughts in getting the best organization, the best efforts in building up the dairy organization, and must be nursed, and it will not grow if we allow trust methods to crush it.

The Chairman: Mr. Hansen of Utah has furnished us a paper on a few dairy problems in Utah.

A FEW DAIRY PROBLEMS IN UTAH.

By Willard Hansen.

During the past few years, the Dairy and Food Commissioners throughout the United States have done a good work in correcting the evils of misbranding, adulteration and unsanitary handling of foods. Some of the great problems to be settled in the future, however, are in the dairy lines, especially the sanitary production and handling of the milk supply. Bacteriologists, scientists and doctors tell us that there is more disease and death (especially among infants) due to the unsanitary handling of our milk supply than through any other cause.

Realizing this to be a fact, some three years ago Utah adopted the score card system authorized by the United States Department of Agriculture, with a view of remedying some of these conditions. These score cards have been the means of accomplishing a great deal of good in the sanitary production of milk, however, in making a personal inspection recently, I found that there was still a great deal of work to be done. In some dairies that had been given a high rating on the regular inspection, I found that the milk pails were not being properly washed; in the crevices of the hood covered pails there was an accumulation of bacterial growth, and a carelessness was manifested in the proper cleaning of the cows and the changing of the milkmen's clothing during milking time.

These conditions were found in dairies supplying fresh milk for city supply.

As state commissioners, you no doubt have all had experiences with the milk supply of some of your cities and have found, as I have, that in many cases conditions were far from what they should be. Coöperation of national, state and city departments is necessary to accomplish the best work, and a plan should be devised whereby the state and city dairy and food departments could work more harmoniously and avoid the friction that exists in many states. According to the state laws of Utah, the commissioner has the authority to make inspections throughout the entire state, yet he has no jurisdiction whatever over the inspectors of the various cities. It is my opinion that in order to handle this work properly, it will be necessary for the city inspectors to report the conditions they find to the state commissioners, and by so doing, the state departments will be in close touch with all the work that is being accomplished.

During our rainy season, nearly all of the milk we collected for analysis contained sediment perceptible to the naked eye. In our well regulated dairies with modern barns and equipments, this condition of course does not prevail,



WILLARD HANSEN,
State Dairy and Food Commissioner of Utah.

but we have in our state over eight thousand dairy farmers producing milk that is finding its way into the various dairy products, and after making a thorough investigation, I find that during rainy weather over ninety per cent of this milk will be a little dirty, dirty, or very dirty, as our chemist defines it. In a great many cases, the cows are milked in the open pastures or corrals, with the rain pouring down on the cows and milkers and the milk drawn under these conditions could not be very clean. As yet I have found no means whereby this condition can be readily remedied, for in many cases the cows will be many miles from shelter when showers come up during the milking period.

The dairy and food laws of Utah prohibit the sale of unclean milk, or milk drawn from cows that are in a state of filth from an accumulation of animal refuse or any other cause. In finding such conditions and knowing that it is impossible to remedy them at once is when the food commissioner will stop and think twice before filing complaints, as these conditions have existed for many years and cannot be remedied with a few prosecutions, though we have had several prosecutions against dairymen for this cause and find it has had the effect in certain districts of causing a general clean-up and improvements along sanitary lines. We

have gained good results by writing the dairymen, calling their attention to our laws and in some cases threatening prosecution.

On my visit to some of the leading dairy states last season, I made an investigation and found the same conditions existing there during inclement weather. The dairy and food departments in our leading dairy states have accomplished a great deal of good through instruction work along the dairy lines, as well as inspection work, and the enforcing of the laws. In some states this work is left with the agricultural colleges, as is the case in Utah, where much is being accomplished by our college. Yet, by the enforcement of our laws and a word of encouragement and instruction given, we find that the Dairy and Food Department has done good work along the lines of the sanitary production of milk.

In our state, as well as in some of our neighboring states, the methods in dairying are changing from the private and coöperative plan to the large centralizing creameries. This has caused the closing down of many of the private and coöperative creameries, and though a few are still existing, they are not making the progress they should, due to the competition they are compelled to meet.

The dairy and food commissioner has a great problem to handle in the collection of cream sent from the various sections of the state and adjoining states. Complaints are continually being received from the farm dairymen that the centralizing plants are not reading the tests properly. In order to remedy these conditions, we had a law passed by our last legislature, regulating the reading of the Babcock test, making it a misdemeanor to under-read or over-read the test, also defining the standard of the apparatus used and making it a misdemeanor to sell any apparatus in the state other than the defined standards. (In all of the condenseries and creameries throughout the state we have made investigations and found the standards in compliance with the law.)

In an attempt to find out if the complaints were well founded, after a series of tests we found that the chemists analysis on cream taken by our inspectors from the cream haulers before it reached the centralizing plants, gave in one case an average test of four per cent and in another case an average test of 2.5 per cent greater than the test given by the centralizing plants. This percentage was based on butter fat per one hundred pounds and would total up to a neat sum in a short time.

Calling the attention of these plants to this fact and asking reasons why complaints should not be filed against them, we were met with a volley of oratory, figures and facts to show that the creamery companies, instead of the farmers, were the losers. One creamery claimed that it paid for eight hundred pounds of butter fat each month, which it never received. Another company showed the daily slips from the various loads of cream sent to the creameries, and almost invariably these slips did not show the test to be as high as the samples sent in by the haulers. I have followed this proposition up very closely and have found it to be a fact that the haulers' samples will invariably test higher than the cream received at the centralizing plants.

We find that haulers, in taking samples from the small cans of cream are usually more or less careless and invariably get the heavier portion of the cream for their samples. This the creamery men are fighting and are continually sending out in structions to their men relative to the proper collection of the cream samples. Yet, in the face of this precaution, it appears that the haulers have their friends along the routes whom they favor, and if the creamery man should take the sample tests of cream as given by most of their haulers, they would actually lose a great deal of money. Samples of cream have been sent to the creameries by the haulers that have tested as high as 75 to 90 per cent butter fat, when the actual test found by the creameries would be from 20 to 30 per cent butter fat, thus showing that the employees occasionally cannot be trusted.

In making these statements, I am not trying to justify any wrong doing, if there be any, on the part of the centralizing plants or the farm dairymen, but am only trying to show the conditions as far as we have found them. The farm dairymen, however, look to this department for protection, as they are not equipped with the Babcock testers, therefore, we expect to continue our investigations. We have urged the necessity of every farmer purchasing and operating his own Babcock tester, and have advocated that the schools in our dairy districts purchase and give instructions to the boys and girls in the use of these testers. In some districts, this has met with a great deal of success and much interest has been

shown. It has been suggested to me that the state put deputies at all centralizing plants to test all cream in order that the dairymen may feel that they are being dealt with fairly. This plan might work out alright and be the means of satisfying the creamery men as well as their patrons.

Just recently we completed a series of tests at one of our condenseries, where complaints were being made by some of the patrons that they were not receiving accurate tests. One of our deputies was sent there and samples of the milk were taken and tested by him just as they were received. We found through this investigation that in most cases the people who were complaining of the low tests were selling milk to the factory below the state standard of 3.2 per cent butter fat and 12. per cent solids, thus showing evidence of the milk having been skimmed or watered, and proving that the factory was in no way falsely manipulating the tests.

The collection of cream in remote districts throughout Utah and adjoining states has caused a great deal of complaint relative to the handling of the same, which in many cases is very unsanitary. It is up to the dairy and food departments to work in harmony to remedy these conditions, and some standard should be adopted whereby cream reaching a certain stage of acidity or decomposition should be condemned for food purposes.

I desire to mention one more problem that has come before us for adjustment. Just recently a creamery man in the state of Utah was notified by a merchant in an adjoining state that unless a guarantee accompanied each shipment of butter that all the cows from which the milk was obtained had been tuberculin tested, he would be unable to handle the butter under his state law. I have had occasion to look up the statistics of a number of the states in the Union regarding tuberculin tested cows, and it is my opinion that it would be a very hard thing to find a state which did not have some cows which were not affected with this dreaded disease, and therefore, the dairy products from all of the states would be prohibited from entering this certain state.

I desire to quote from the report of Dr. F. E. Murray, who has charge of the Bureau of Animal Industry, United States Department of Agriculture, with headquarters at Salt Lake City. His statement in November, 1910, concerning conditions in Utah is as follows:

"Up to date we have tested 7,687 head of cattle of which 351 reacted, i. e., were diseased. Of this number, a very large percent have been killed, and in every instance, where we held a post mortem examination, we were able to find the disease. We expect to continue the work until we have tested all of the dairy cattle within the state. From the low percent of the disease found, I believe that this state will be very easily cleaned up and kept free from disease by not allowing cattle to enter the state except those that are known to be healthy.

"It is very gratifying to note that greater progress has been made in Utah in regard to the eradication of tuberculosis than any state in the Union."

From this report it would appear that there need not be any alarm on the part of our sister states relative to dairy products sent out from Utah. I can say truthfully that since Dr. Murray made this report the entire state has been covered and as near as we have been able to learn, there are no cows in Utah suffering from tuberculosis at the present time.

My experience as Dairy and Food Commissioner has lead me to believe that the many dairy and food problems that are continually coming up cannot be settled without thorough investigation, and even then it will take years to remedy conditions and have them as we would like. However, time and the enactment and enforcement of reasonable laws will change these conditions. We have laws on our books today which, if literally enforced according to their writing, would be the means of wrecking the dairy industry (and many other industries), and the only method whereby we can be able to build up the dairy industry will be through educational work and the sane enforcement of the laws.

The Chairman: That about completes the program for the day and a motion to adjourn is in order.

Mr. Hansen of Utah: I move we adjourn.

Motion seconded.

The Chairman: What is the wish of this body? Shall we adjourn? Those in favor kindly say "Aye," those contrary, "No." The "ayes" have it, and therefore we will adjourn.

(Adjourned at 4 p. m.)

Official Proceedings

Section C—Food Analysts

TUESDAY, JULY 9,

2 P. M.

The Chairman: The Association will please be in order. Gentlemen of the Association of Food Chemists: You will observe that I address you by the title under which you organized last year, rather than under the proposed title which we expect later to bear.

By virtue of the brief authority you have placed in my hands, I am about to fire the first gun, announcing the organization of a new battalion enlisted to fight as one of the forces for the public welfare.

The size of the gun and the amount of noise it makes bear no fixed relation to the importance of the events whose coming they announce. Just as the coming of the master workman of the skies to his higher field of labor, is heralded, not by lightning's flash and drum beat of thunder, but by the sweet smile of silent dawn, so many another important factor in the world's work comes to its labors in modesty and gentleness, yet earnest to meet its task.

It might be asked why, with so many organizations in which we are all interested, there is need for another? Had not an answer to this question been provided elsewhere in this program, I should have undertaken a specific reply, but I will confine myself to the general rejoinder that there is value in, and need for conference between those engaged in each phase of every great work.

Let us consider in brief, the relations which the official chemist holds under the food and drug laws of this country,



WILLIAM FREAR,
State Chemist of Pennsylvania.

so that we may the better perceive the various phases his work assumes.

These laws prohibit the departure in certain generally indicated ways from the normals for all articles of food and most drugs. They describe in the case of foods, however, absolutely no base of departure, and in the laws of both foods and drugs, prescribes no measure of departure. The courts are usually made the final arbiters of these matters, but they do not decide until each question arising has been shaped, nor until the executive representative of the people has first reached a conclusion. The first judgment as to what things are, what their normals are, what the variations are to which these normals are subject, how departures can accurately be measured, and beyond what degree of variation the conditions require the application of the law's machinery; all this devolves almost exclusively upon the official chemist. If he fail in his conception of the public need, if he lack energy and wisdom in his office, if he lack diligence and become that sad object, a creature of routine in a world of

progress, the heart of the food control work must beat slowly and weakly. If he is bold but erratic, sensational rather than clear headed and steady, arbitrary rather than careful to be just, given to imagining that mere official position can replace knowledge and skill, he may bring disrepute upon many an honest man, whose good name has been bought by years of righteousness, and to whom and his loved ones it may be dearer than life itself; may unhinge the steady swing of useful business, and, in the end, harm rather than help the very public under whose banner he is enlisted, and to whom he has sworn loyalty.

Not only is the official chemist of necessity, under existing conditions, the first judge of the law and its principles as well as of the facts, but upon him also devolves, in a large measure, the shaping and presentation of the people's case to the court of first appeal. In this statement, I would not in any way belittle the valuable services of our colleagues, the expert counsel with whom we join in the latter phase of our duties. The mutual relation is indispensable here as in all other cases where technical questions become issues at law.

I am simply endeavoring to suggest the existence, nature and importance of that phase of the official chemist's work.

It may be thought that I have taken too seriously the injunction of the great apostle, that I magnify my office and its functions; but let us consider. In the olden days when kings sat trembling at the board in momentary fear of the deadly poisoner, some high and trusty officer was made "king's taster," and for him made first trial of every viand, and sipped of each cup for the king. The business of king's taster has long since disappeared from the laws, but the danger is not wholly gone, and today in this great land of ours the official chemist takes the place of the king's taster and tests the meals which are consumed by our ninety millions of masters.

We are not simply the tasters of foods, but many of us are the gaugers of drugs, one drop of which if wrong, will bring death. We are besides that, guardians of the purse to every consumer in the land, and we stand as exponents of the modern conception of commercial morality, so that in saying that the office that we bear imposes upon us careful responsibilities worthy of our best efforts, and worthy of our noblest thought, is not, I think, too greatly stating the case.

I will turn your thoughts for a moment from some of the conditions of our labors today, not by way of an extensive detail, but simply by way of contrast of what has gone before. Those of you who have taken the pains of looking over those pages of the *London Lancet*, in which Dr. Arthur Haswell set forth the condition of the food and drug trade in England, the revelation of which lead to the passage of the first English food and drug act, will realize from the knowledge of the expert literature of that day the very small volume of investigation, will realize the tremendous difficulties which any man faced when engaging first in such an undertaking.

Today the conditions are greatly changed. Fifty years of science and endeavor in this field of investigation have given us a tremendous number of facts, that he did not have concerning the composition of raw materials and concerning the changes which manufacturing processes have wrought in those materials. We, too, have the advantage of improved methods of analysis.

On the other hand, with all these advantages, we find ourselves facing difficulties yet unsolved, difficulties due rather to the greater skill of those who seek to make science hand-mate to greed, and so the very mistress we have loved, at whose feet we have sat, may also be turned upon, and be beguiled into making difficulties for us in our work. So that the difficulties of today are probably as great as they were when Haswell began his revolutionary investigation of the conditions of the English trade.

We have, therefor, need to consider these various phases of work in which we are engaged, phases, many of them which affect no other people in this land than ourselves as responsible officials, and we may well come together for the serious consideration of selected problems in that portion of our work which is not adequately covered by other proper existing, well organized and satisfactory conducted associations of chemists.

This program as set forth in the official program of the Association of American Food and Drug Officials, differs somewhat from the program arranged under your authorization by your chairman and secretary and Mr. H. M. Loomis of the Food and Drugs' Laboratory, who kindly consented to act with us in this work. I think the variation is the result of misapprehension of conditions rather than anything else, and the chairman and secretary have decided that, in view of all the circumstances, it would be best to adhere, at least, in so far as the announced papers are concerned, to the program as originally prepared for this Association of Food Chemists, and, accordingly, we shall follow the program essentially as it is printed on page four of the AMERICAN FOOD JOURNAL for June 15, 1912, save as mutual convenience and avoidance of conflict with other sections may make necessary some readjusting in the order of the program.

The first paper of the afternoon is that upon the subject of relative toxicity of substances found in foods. It will be presented by Dr. A. N. Cook, of South Dakota.

Mr. Cook: Members of the Association and Ladies: I fear that when I get through you may decide after all, that I have not told you anything about the relative toxicity of substances that occur in foods in general, but only with reference to these animals concerning which I shall speak, frogs and fishes. When the work was completed, under my direction, my opinion of the work was far different from what it was in the beginning. I hoped that I had helped solve an important question, and not until after the work was done, and I was to present it to the scientific society of the University, and began to look over the results carefully, did I change my opinion, and I feel like apologizing, almost, this afternoon for presenting this paper. I had not thought of using it, or publishing it, but I received a letter from somebody, who it was I don't know—I think it was some member of this Association, requesting a paper, and saying that you would be hard up for papers, so I consented to give it.

RELATIVE TOXICITY OF SUBSTANCES FOUND IN FOODS.

By Dr. A. N. Cook.

This investigation was undertaken with the hope that some useful data might be accumulated which would help solve the question of chemically preserved foods and their effect upon the human system. The experiments were carried out by five different persons, but mostly by Miss Sylvanna Elliott, assistant chemist, under the direction of the South Dakota Food Commissioner.

Since our laws and ethical standards forbid that the experiments of the nature to be described should be made upon human beings, the only available method is to experiment upon animals of lower rank and make deductions from the results obtained. It is possible that the results of this study are not as valuable as those which might be obtained by experiments upon animals more nearly related to the human race, but at the present time but little data has been accumulated which would indicate that fact.

It has been demonstrated a number of times in some instances that which is food for one animal is poison to another, for example; copperas is poison to a human being, but it may be eaten by hogs with impunity; saltpeter may be taken into the human system in considerable quantity, but it is poison to a sheep. Notwithstanding these occasional known instances, there has been a difference of opinion with regard to the value of such experiments, but many men high in authority have held them to be of considerable value.

Because of the difficulty of properly caring for many animals in the laboratory, our experiments were mostly confined to gold fishes and frogs. The frogs averaged about 25 grams in weight and the gold fishes were from three to four inches in length. The frogs were of fairly uniform size and were kept in shallow pans which are carefully enameled so that there was no possibility of chemical action between the substances in solution and the tin of the container. The frogs were kept partly immersed in the respective solutions. The gold fishes were also of fairly uniform size and were placed in litre beakers. Both frogs and fishes were kept in one litre of solution, said solution being renewed often to prevent any error by concentration, due to evaporation of absorption. The solutions were prepared with distilled water. An attempt was made to find that strength of a given solution in which a frog or fish would live from five to seven days, but the factor of individual resistance, of course, interfered with the mathematical exactness, and the necessity of using an average of the results obtained is very apparent. Several hundred frogs and fishes were sacrificed in making this investigation,

and the results here recorded are an average of a large number of experiments.

In order to have some standard to go by, that particular strength of benzoate of soda which would cause the death of a frog or fish in from five to seven days was called "one," and the various strengths of solutions of the various other chemical substances experimented with, divided into "one," was taken as the degree of their toxicity compared with that of sodium benzoate.

Our conclusions from these results were far different from our expectations in the beginning, which expectations were based upon opinions of some men eminent in the field of investigation. The Referee Board appointed by President Roosevelt laid considerable stress on the fact that sodium benzoate was not toxic to frogs, as comparative evidence, in drawing conclusions as to its toxicity to men.

So far as we are aware, no series as extensive as those here recorded have ever been made. Only isolated experiments have been conducted here and there, with no effort at comparative results.

(Points to diagram on board.)

These columns here (indicating) are the substances employed, and I will put down the relative toxicity as determined by our experiments. First, about frogs:

Substance in solution.	Relative toxicity. Sodium benzoate—1.
Sodium benzoate	1.
Potassium nitrite .....	.25
*Sodium sulphite .....	.7 (?)
Sodium chloride	1.
Borax	1.
Sodium salicylate	2.
Glucose	2.
Alcohol	2.
Rochelle salts	3.
Potassium oxalate	5.
Citric acid	6.
Cane sugar	6.5
Malic acid	9. appx. ±
Saccharin	10.
Benzoic acid	13.3
Tartaric acid	15.
Alum	20.
Acetic acid	25.
Caffeine	42.
Guaiacol	150.
Ortho Cresol	175.
Phenol	220. appx. ±
Meta Cresol	250.
Para Cresol	300.

*About two days after the frogs were placed in the sodium sulphite solution, a milky precipitate was formed. Hence, the above relative toxicity is questionable.

So much for frogs. Now with regard to fishes:

Substance in solution.	Relative toxicity. Sodium benzoate—1.
Sodium benzoate	1.
Cane sugar .....	.004
Rochelle salts .....	.057
Glucose .....	.114
Alcohol .....	.16
Potassium Oxalate .....	.428
Caffeine	2.80
Saccharine	2.85
Citric acid	6.00
Alum	8.00
Acetic acid	8.57
Phenol (carbolic acid)	10.70
Malic acid	12.80
Tartaric acid	14.00
Benzoic acid	20.00
Para Cresol	24.00
Meta Cresol	24.00
Ortho Cresol	30.00
Sodium chloride	Not toxic

According to the tabulation submitted herewith, using frogs as subjects, and calling the toxicity of sodium benzoate "one," borax, sodium benzoate and sodium chloride all have about the same relative toxicity. Sodium salicylate is about twice as toxic as common salt and possesses about the same toxicity as glucose and alcohol. Rochelle salts, occurring in baking powder residues; potassium oxalate, occurring in rhubarb; malic acid, occurring in apples, and cane sugar—all are considerably more toxic than sodium salicylate. Cane sugar is about three times as toxic as glucose. Tartaric acid, oc-

curring in grapes, and acetic acid, occurring in vinegar, are more toxic than saccharin.

In case of fishes, sodium chloride is not toxic. The toxicity of cane sugar, glucose, Rochelle, salts, alcohol and potassium oxalate are much less than sodium benzoate; whereas, in case of frogs, their toxicity was much greater. Citric acid is more toxic than either caffeine or saccharin. Malic, tartaric and benzoic acid are more toxic than carbolic acid; whereas,



ELTON FULMER,
State Chemist of Washington.

the reverse is true in case of frogs. In both cases alum seems to be much more toxic than sodium benzoate, caffeine and saccharin.

After studying the data somewhat carefully, I have come to the conclusion that such experiments are utterly valueless in determining whether a given substance is toxic to the human system. The only apparent practical value in such a series of experiments would be to show that such methods could not be relied upon to furnish much reliable data which would assist in the solution of the problems before the food chemist. Such experiments as these are often relied upon at the present time as evidence in court as to the poisonous character of substances used in foods. Very frequently they are relied upon as confirmatory experiments, but I believe the experiments upon animals so distantly related to man are utterly valueless even for this purpose. However, since the above data were accumulated at the expense of considerable time and money, we herewith submit the same. Peradventure, they may be found to be of some interest, and perhaps of some value.

The Chairman: The subject is now open for general discussion. Speakers in the discussion are requested to limit themselves to not more than five minutes in their remarks.

Mr. Chittick of Iowa: I would like to ask a question of the Doctor. In making these experiments you chose sodium benzoate as your standard. May I ask what quantity or what solution of sodium benzoate was found necessary to kill fish in from five to seven days and in frogs?

Mr. Cook: I must tell you that it is two years since these experiments were carried out, and I cannot just tell you now. We have the data on file, but I cannot answer you just at this moment. I am sorry that I cannot answer you, but I will be glad to answer you by mail when I get home.

Mr. Chittick: All right, Doctor.

Mr. Harms of Utah: What is that, potassium nitrite or potassium nitrate?

Mr. Cook: I think I said potassium nitrate, by mistake. There is one thing I have forgotten to say. These experiments, except in the case of frogs and fishes, are not very

extensive, but we started out to experiment on cats, but finally had to give it up because of certain conditions. We found out that these full grown cats thrive on sodium benzoate and alum, fed to them in milk, of course, and that is contrary to other experiments reported. In the case of frogs, however, they died after a while. I don't remember just how long. They died after a few weeks with symptoms very similar to strychnin. It seemed very wonderful to us. We even wondered whether it was not possible that they got hold of some strychnin by mistake.

Prof. Elton Fulmer of Washington: In regard to the last remark of the speaker that different animals present different characteristics, I remember a few years ago, it became my duty to investigate the poison parsnip, which grew in Western Washington quite extensively, and I extracted considerable oil from the parsnip. While doing so a mouse was injudicious enough to run across the floor of my laboratory and I caught the little fellow, and I took the sharp point of a toothpick and dipped it in the oil and I rubbed it over the jaws of the mouse, and fifteen minutes later he was dead. The next day I took a cat and fed it in large doses, and it simply called for more. When we get such astonishing results among the lower animals it is quite safe to say that we are not able to reach conclusions as to effects upon human beings from the effects on animals.

The Chairman: If there are no other remarks on this subject we will proceed to the second paper on the program, a discussion of the objects to be attained by Section C. by Mr. Bryan.

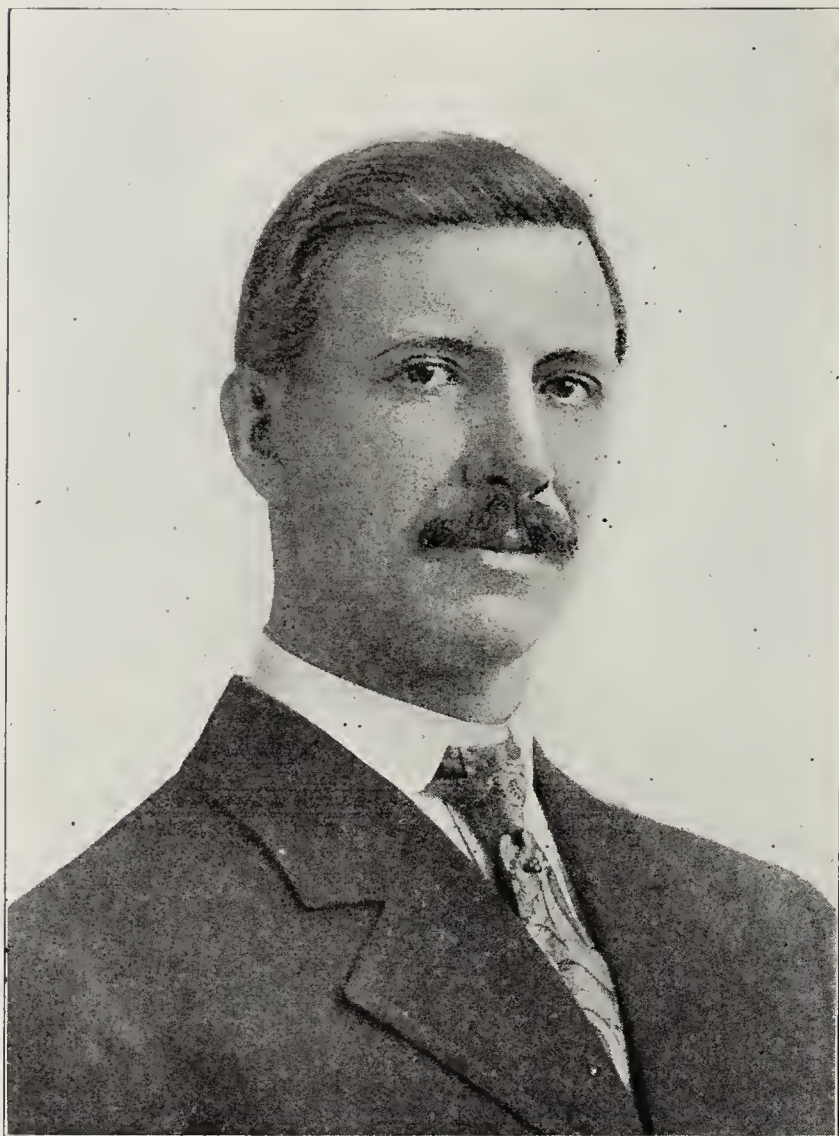
OBJECTS OF SECTION C.

By T. J. Bryan.

The Association of State and National Food and Dairy Departments has up to the present time conducted all its business as a single body without any division into sections. It is true that two years ago at New Orleans an organization of State Food and Dairy Executives was formed, and this was looked upon as a sort of subsidiary body. It had, however, no recognized connection with the Association of State and National Food and Dairy Departments and was an independent body, its object being to give the executives an opportunity to more fully discuss the problems which confronted them in the performance of their duties, and its membership being derived entirely from the Association were facts that made the announcement of their meeting on the program for the meeting of the Association at Duluth, a natural matter. Just how it happened that a meeting of the chemists was fixed for the same hour by that program I do not know, nor have I heard of any chemist who was consulted with reference to the desirability of such a meeting. Perhaps the Executive Committee who prepared the program thought that we would be less liable to get into mischief while our elders, the Executives, were away at their meeting. We met at that time with no prepared program, formed a temporary organization, and discussed to some extent the ends that might be gained by such an organization. Subsequent to that meeting a new constitution was submitted to the Association in which provision was made for sectional meetings, among others Section C, Food Analysts. This constitution was not adopted but action at that time indicated that the general provisions were satisfactory, and that the constitution would be adopted at the 1912 meeting without material change. Accordingly we may well consider at this time what the objects of this section are to be and how its field may be limited by other organizations, including the Association of which it will be a part.

That the work of Section C should limit itself to those factors of food control work which are peculiarly within the chemists' field, is obvious, but that all such matter should necessarily be discussed in Section C is far from apparent. The material suggested by four or five of the articles on the present program could be profitably discussed in the general meeting of the Association. When it is desired by the main organization the paper should undoubtedly be so presented if the author has no objection, but he should be allowed his preference if he has one. Aside from such limitations, the section will be further limited in its activities if the preparation of its program is to be censored or wholly determined by the executive committee of the Association, a body composed largely if not wholly of men not chemists. This body knows better than any other body on which it is not represented or of which it forms only a part, what and whom it wishes to hear, and at what times the admission or exclusion of those not in its membership either to its meetings or to the discussions is desirable or profitable. If we

are to have an organization and to stand before the people as such, we must have an adequate control over the work it is to perform. Without that adequate control, we will be listening to the program of some one else's organization. In the opinion of the writer, this organization should control its program and close or open its doors or program to those not members (including manufacturers) at will. These two things being granted, the section will need no representation on the Executive Committee. Its powers being limited to



T. J. BRYAN,
State Analyst of Illinois.

these two things, it could not conflict with the work of either the other sections or of the Association itself, and any resolutions it made would be limited to recommendations to the Association whether they pertained to general matters or to such questions as standards. The question of how far this organization shall control its own affairs has already been raised and should receive our careful consideration at this time, and the powers of the section should be clearly and rightly defined in our constitution and by-laws so that misunderstandings will not arise later. The line of work upon which this section may consistently and profitably embark are indicated by the following headings:

1. Laboratory Records.
2. Methods of Analysis.
3. Standards (physical and chemical constants of foods).
4. Interpretation of Results.
5. Apparatus and Laboratory Equipment.
6. Coöperation of Members of the Section.
7. Manufacturing Processes Affecting the Finished Product.
8. Publication of Scientific Papers.
9. Toxicity of Substances Found in Foods.
10. Chemical Changes in Foods.
11. The Chemist's Testimony.

Every paper on the program of this section for this meeting easily falls within these headings, all of the eleven being

treated more or less directly except 6 and 8, "Coöperation of Members of Section C," and the "Publication of Scientific Papers."

Laboratory Records is a subject which this section may discuss without encroaching on the work already undertaken by any other body. The forms in use have been worked out by the different state departments with little or no coöperation from others. Each without doubt has its own advantages and disadvantages. A study of all of them will doubtless result in a new form better than that now in use by any one.

Methods of analysis are a matter which require almost constant thought and attention by the members of this body. That they should have no place on our program would be to admit that a study of such methods was already being made in as thorough, prompt and adequate manner as could be done by this section. It would also imply that the work of that body or bodies was promptly available to the members of this section for their use. An attempt to find a place in a field already well occupied can not be advantageous to this section. The Association of Official Agricultural Chemists, of which many of us are active members, has for many years been engaged in the comparison of different methods and in the discovery of new ones. Moreover, it has placed its stamp of approval on those that were found to be best, adopting them as official for that Association. In the passage of the food and drugs act, we find these sections receiving sanction of law, though subsequent court decisions have determined that any other accurate method may be applied in the testing of foods and drugs which is accurate and useful in the detection of adulteration. The American Chemical Society Agriculture and Food Section also has a committee on methods of analysis. Those who are interested in the analysis of drugs or of foods containing drugs, have found the work of the American Pharmaceutical Association and the American Medical Association of great assistance. With the fields of methods of analysis of foods and drugs so well and so completely covered as they are by these organizations, it is apparent that this section cannot make investigations along these lines one of its chief functions. That the adaptability of methods to the analysis of different classes of foods will be a matter of natural and frequent discussion is conceded, but the investigation and adoption of methods as followed by the associations mentioned would result in a division of labor that would be without profit. The continued coöperation of members of this section with those associations along this line will with its concentration of effort continue and improve the discovery and accuracy of methods and the publication of them in unscattered form. Occasions may arise when it will be to the advantage of this body to listen to discussions of both new and old methods, but in the opinion of the writer, no occasion can arise for the adoption of methods as methods of the section or of this Association until these other associations cease their activities along these lines. Standards, including certain chemical and physical constants, have at times been adopted by this Association. The preliminary investigations have been conducted by committees composed of chemists of this Association, sometimes acting alone and sometimes acting with a committee appointed by the Association of Official Agricultural Chemists for the same purpose. Irrespective of the value of these standards for purposes of prosecution they are of the greatest value in assisting the chemist in the determination of the purity of food products. If this Association should continue its work of formulating food standards, the chemists must do their part in that work. In any case the discussion of the minimum and maximum figures for any determination on food will always be a pertinent and profitable matter to engage the attention of this section, and it not precluded by the work done or now being done by the Association of Official Agricultural Chemists. In fact, if any existing association has a claim to include the formulating of food standards as one of its natural activities, it is this Association. With reference to standards for drugs the opposite position must be taken, as this field has already been filled by other organizations whose work is more closely related to drugs than are ever the individuals of the A. S. N. F. D. D. in the enforcement of drug laws.

The interpretation of the results of chemical analysis is greatly facilitated by standards for food products. But in the case of compounds and mixtures, when it is desired to determine the percentage of any ingredient present, only a part of the data given in the standard is available and sometimes none. The figures given in the standards are generally maxima or minima. We would approximate the exact amount more closely by a use of the average figure as shown by the natural product. True, the state chemist is always on the

safest side if he gives the manufacturer the benefit of every doubt, using the maximum or the minimum figure necessary to that end. In the average case this will give the manufacturer leeway for considerable deviation from the statement on the label. However, close study of the different figures in the same standard shows some to be of greater value than others for the determination of the percentage of an ingredient in a certain compound, and also in fact in the determination of the purity of a single food substance. Standards do not generally give even the true maxima and true minima for these figures and those standards adopted by this Association give no averages. For such ends suggested it is desirable that we should discuss very fully the interpretation of results in this section.

Apparatus and Laboratory Equipment, Coöperation by Members of this Section, and the Chemist's Testimony, are subjects of direct interest to our members. The Study of Manufacturing Processes Affecting the Finished Product, the Chemical Changes in Foods, and the Toxicity of substances found in food are necessary to the intelligent work of the chemist. The determination of the toxicity of a substance found in food may not be the work of the chemists in this section, but the presentation of papers setting forth such facts, together with the methods of investigation, will always be of great benefit to members of this body.

There remains of the subjects previously mentioned in this paper, that of the Publication of Scientific Papers. This is as much a question of the policy of this section and Association as of a field of work. The desirability of publishing the scientific papers presented at these meetings, both for the purpose of maintaining complete records of the meeting and also to assure each member of this body receiving a copy of the same, need not be discussed. Nevertheless, the desirability of an article being published in a scientific publication along with other matter of a similar nature must be admitted. A waiver by this section of the right to publish such articles presented before it, would remove some objections to the presentation of some papers before this body, and would result in our receiving information that would be immediately available to meet pressing needs and which would otherwise not be available for months, and might even entirely escape our observation for a much longer time. It has not been the writer's purpose in this paper to do other than briefly call your attention to matters pertinent to the future activities of this section, in the hope that such definite policies may be adopted at this early day as to insure purposeful, well directed application of the energies of the section, and that we may have in view the needs of the section during the discussion and adoption of the new constitution and by-laws by the Association. (Applause.)

The Chairman: The subject is now open for discussion. The Chair would suggest at this time that the subject is of such importance, in view of the present stage of casting into form the organization of Section C, as related to the entire organization, that whatever discussion there may be ought probably be provided for at some time later than the present time in order that mature consideration may be given to any proposals. My suggestion is not to stop discussion at this time, but simply to suggest the desirability of arranging for some time when proposals looking to the representation of this section in relation to the matter of provisions in the Constitution of the main Association should be taken up. Some fixed time after the present moment and sufficiently long before the time the Committee on the Constitution of the parent Association will report should be set. Remarks are in order.

Mr. Cook of South Dakota: I do not know that what I have to say is closely connected with the suggestion derived from this paper, but I am a little fearful that I may not get another opportunity to make this suggestion, and therefore I state it now, and that is, I wish that the officers of the Association in preparing the program for next year might arrange for some discussion on the methods of analysis. We have had a little trouble in that direction. We have found that the methods of analysis are occasionally faulty and not trustworthy of results, and there must be somebody in the country who might be induced to attend this meeting, and, knowing more than we do along that line, might address us on the subject, and I for one would like very much to see this subject taken up next year and hear it discussed.

The Chairman: Any other remarks?

Mr. Loomis of Washington: Having heard what Mr. Bryan and the Chairman have stated, I move that a committee be appointed to consider this proposed constitution and report tomorrow afternoon at 4 o'clock.

The Chairman: We have heard the motion. Is it seconded?

Mr. Cook of South Dakota: Mr. Chairman, I have not heard the motion.

The Chairman: The motion is that a committee be appointed.

Mr. Loomis of Washington: By the Chairman?

The Chairman: By the Chairman, to consider what changes, if any, should be made in the proposed constitution to best adopt it to the work of this body, said committee to report to this body at 4 o'clock Wednesday afternoon.



J. R. CHITTICK,
State Chemist of Iowa.

Mr. Bryan of Illinois: I would like to state with reference to the time at which to report that I have been requested to make an announcement here that an automobile ride has been arranged for tomorrow, Wednesday afternoon, for members and their ladies, and the party will leave this building promptly at 4 o'clock.

The Chairman: We have heard the motion and what Mr. Bryan has stated in regard to 4 o'clock. What is your desire?

Mr. Loomis of Washington: I would suggest that the committee report at 3 o'clock tomorrow afternoon.

The Chairman: The motion has been amended to 3 o'clock instead of 4 tomorrow afternoon. Is that satisfactory?

Mr. Bryan of Illinois: I will second the motion as amended.

Mr. Fulmer of Washington: Mr. Chairman, I suppose the appointment of this committee is all right, but it seems to me from what has been said already this afternoon it is a matter that will require a good deal of discussion. Whether we will facilitate matters by having it first reported by a committee or not is not quite clear in my mind. However, what I want to say is this: I do not quite understand the present status. Possibly I am very dense, but our Secretary has just stated that we are not as yet affiliated with the other Association. I would like to have an explanation before the question is put as to what the present status of this body is.

The Chairman: The Chair will relate that at the last meeting of the Association of Departments, I will use the name in a short way, a revised constitution was presented for consideration, and that constitution was in effect re-committed for revision at certain points and was not officially adopted, but is to come up as a special order on Thursday of this week for action.

Dr. Mahr of Oklahoma: I understand it is Wednesday night at 8 o'clock.

The Chairman: I thought it was Thursday night at 8 o'clock.

Dr. Mahr: It was reconsidered and left for Wednesday night at 8 o'clock.

The Chairman: It is to come up on Wednesday night at 8 o'clock, so that, as a matter of fact, the final arrangements by the parent Association, if I may use that phrase, have not yet been perfected. This present subdivision of this meeting is purely tentative, pending such action as may be taken on Wednesday night. Now, entirely independent of any action by the parent Association, I was present at one or another of the last two or three meetings of the section dealing with subjects of interest chiefly to men having a certain kind of responsibility in connection with our control work, and among those was an association of food chemists which organized last year and elected a chairman and a secretary and directed them to prepare not only a program but also by-laws for presentation at this meeting, and in the correspondence that has arisen on the question of program your chairman has taken the position that it takes two to make a bargain, that this formally organized association, although in its infancy, I



H. M. LOOMIS,
Chief of Seattle Laboratory, Department of Agriculture.

will admit, ought to take formal action affiliating itself as a section with the Association of State and National Food and Dairy Departments, as well as a departmental association itself, making arrangements for sectional meetings on its part; in other words, that until both of these organizations take action, the union is not perfected. That is the status according to the ruling of your chairman.

Mr. Chittick of Iowa: It seems to me at this discussion the question now is whether or not the Executive Committee of this Association shall make the program for the individual sections, or whether the sections themselves shall make their program. That is how I understand it.

The Chairman: That is one of the problems.

Mr. Chittick: That is one of the problems. In this tentative bill now, the Executive Committee shall arrange all by-laws. Now, would it not be well to have a committee appointed to take up this matter and to report here when this comes up for discussion tomorrow, and not have it stand for individual discussion?

The Chairman: The Chair would like to suggest that there is a great possibility of animus arising by being misunderstood. There is provision made by the Association of Departments for a revision of the proposed constitution. It

is asked that suggestions of change be submitted to that committee. I should say it would not be good diplomacy to take the risk of being misunderstood as to motive. We simply want to secure what is the best working basis by mutual consultation and agreement, and I should say therefore from my point of view it would be desirable to reach a decision ourselves first, and present that to the committee, and then, if we do not agree with them, why, we would have our argument presented on the floor, but not until then would it be diplomatic to do so. However, the Chair is governed by the body.

Mr. Chittick: May I ask one question? Is the question before the house now that the committee to be appointed should consult with the other committee first?

The Chairman: It does not instruct the committee. It leaves the matter of election open to them.

Mr. Chittick: Yes.

The Chairman: Are there any other remarks concerning this motion? If not, all in favor of its adoption will signify by saying "Aye"; contrary, "No." The motion is adopted. The motion is not specific, however, as to the number of which the committee shall be composed. What is your pleasure upon that point?

Mr. Bryan of Illinois: Mr. Loomis made the motion.

Mr. Loomis of Washington: The number will be three.

The Chairman: The Chair will announce the names of the committee presently. Is there any other discussion of this subject, presented by Mr. Bryan? If not, we will pass on to the next subject. Owing to the fact that Dr. Loomis is obliged to leave town at 5 o'clock this afternoon and has a paper to be read, which he has prepared, not on his own accord but at our request. I take leave to change the program somewhat as arranged by the Committee on Arrangements, and I will ask him at this time to present his paper on The Arrangement of the Food Laboratory.

THE ARRANGEMENT OF A FOOD LABORATORY.

By H. M. Loomis.

The question of arranging the details of a laboratory depends so largely on personal taste and the apparatus available, especially in a food laboratory where the nature of the work and equipment are so varied, that I shall only cover the more general features in the arrangement of such a laboratory.

It has been my privilege to work in several state and Federal food laboratories and to visit most of the latter, and it is on this experience that my ideas are based.

In most cases the matter of location is not left to the choice of the chemist, so that one must make the best of what is offered in that respect, but three things should be insisted upon—adequate light, ventilation and satisfactory modern plumbing.

To secure proper light and ventilation it is best to devote a whole floor, preferably the top one, to the laboratory. If this is not practicable, the laboratory should have exposure on at least two sides. On the top floor skylights are a valuable addition in furnishing satisfactory light and ventilation. Every effort possible should be made to obtain sufficient light without the necessity of using artificial light during the day.

Until recently food analysts have not had much trouble with acid and other corrosive fumes in the laboratory, but since the determination of heavy metals, particularly tin and arsenic, in food has assumed importance, requiring wet combustion of organic material, this question has become a serious one and greater attention to ventilation has been necessary. To get rid of such fumes forced ventilation seems almost essential, especially if the laboratory has exposure in only one direction. The equipment used in the Seattle laboratory consists of an exhaust fan set in the hood stack and run by an external motor with speed regulator. A simple device allows the air to be drawn up either entirely through the hood or partly direct from the room. This arrangement has given good results, but we have failed so far to find a coating which would protect the fan from the fumes and which would not disintegrate rapidly. It is possible that such a fan can be obtained with hard rubber parts or the metal fan might be coated with one of the forms of Bakelite.

Leach in his *Food Inspection and Analysis* suggests the more elaborate but excellent scheme of placing an exhaust fan in a small room near the center of the laboratory quarters and having connecting pipes leading to the hood and various rooms. The well known method of placing a gas flame in the stack to increase the upward draft may often prove sufficient. In this connection I would recommend any one studying this subject to read the recent article on the ventilation of laboratories by Keller in the *Journal of Industrial and Engineering Chemistry*, 1910, page 246.

The hood is best made of hard wood with large, sliding glass windows and the hood floor should be of tile. It should also be divided into two or more compartments in one of which are the water baths and ovens, and in another the nitrogen digestion apparatus and the hydrogen sulphide generator.

The drainage systems should be as simple and accessible as possible so that leaks or stoppages can readily be repaired or removed. Sinks are best made of porcelain or soapstone and the main sink should be of generous proportions.

Laboratory Benches.—These are best set up in pairs, back to back with a set of shelves for reagents; running along the middle and beneath this shelving it is convenient to have a trough sloping toward the sink at one end. Water, gas and suction pipes are run along the benches over this trough. In some of the very modern laboratories I find that they are putting gas, water and suction cocks along the front of the benches so as to avoid reaching over the benches with risk of breaking apparatus. Cupboards and drawers in the benches are arranged to suit the taste of the designer, but in most of the Federal laboratories the benches are provided with cupboards along the front at each end and a set of drawers of varying depths in the middle.

After experience with table tops made from oak and also from tile, my preference is for the former when treated with the aniline black preparation now commonly used and rubbed well with sand paper and oil. I believe breakage of glassware is much greater with the tile tops and the cement is gradually eaten away between the tiles by acids or other corrosive liquids. For a titration table an excellent top is made from opaque white glass from $\frac{3}{4}$ to 1 inch thick.

Floor.—The most satisfactory floor is undoubtedly asphalt, but on account of its expense is not commonly found in laboratories. Cement floor is more usual and can be put in quite cheaply before the laboratory equipment is installed. The chief objection to it is that it is attacked by laboratory reagents to some extent and is apt to produce more or less mineral dust in the air of the room.

You will see by the sketch—I am sorry it is on so small a scale that it is hardly visible—the arrangement which I have considered most suitable and convenient for a complete laboratory for food analysis. More detailed plans are hardly necessary or desirable. The arrangement of the rooms and principal furnishings of a laboratory is largely dependent on the quarters available, but the plan which is suggested is adaptable to almost any location. Placing the smaller rooms around the general laboratory makes everything easily accessible and compact and where the arrangement is left to the direction of the chemist, these are points worthy of consideration.

The main entrance is through the office while freight and ice can be delivered and refuse collected from the stock room door. As the stock and samples must often be referred to by the office force, it is well to have those store rooms near the office. The samples are best kept in lockers assigned to the different analysts.

The balance, microscopical and bacteriological rooms, are placed as far as possible from the influence of laboratory fumes and the balance room is also separated from the dust and vibration of the grinding mills. If the laboratory is convenient to the basement it would be better to have the centrifuge, shaking and grinding machines located there.

For various smaller electrical appliances, such as fans, motors and hot plates, it is convenient to have a socket and switch at one or both ends of each bench to which such appliances can be readily connected.

There are probably features in the proposed plan which are incorrect from an architectural point of view at least, but I hope some points of value to you may have been suggested.

This sketch which I have prepared illustrates my idea (Explains sketch). Thank you. (Applause.)

The Chairman: The discussion of this subject is now open, but before that discussion begins, the Chair will announce the committee on the Constitution. The committee will be composed of Messrs. Willard, Loomis and Bryan.

Mr. Bryan: With reference to the subject that has just been presented to us, I would like to say that I believe there are as many arrangements of space possible as there are different varieties of space to be arranged, and it is pretty hard to go according to any such diagram which has been presented, which seems to be the best for that particular space available.

There are, however, a good many points that we can gather as to a man's idea of arrangement from such as sketch as has been presented to us, and it is very desirable when

we have the problem of arranging a laboratory that we should have such a sketch before us.

The state laboratory of Illinois has just been rearranged in new space, and we have entirely new furniture, blueprints of which we have, and I can easily have blueprints made of the arrangement in case anybody wants it. There we copied every improvement that we could get, from every place that we could get it. I do not think that we have gotten them all because we have not been to every place, and some things that looked good did not seem to be desirable with us.

There was one thing that I found that was very desirable in Dr. Winton's laboratory in Chicago. He recently had a new desk made, one of these double ones, and there was a space of seven or eight inches between the backs of the two desks, and we arranged it so that we could slide two or three filter racks, which are six or seven feet long, in between the spacing between the two desks as so arranged. Moreover, we found that there was space enough so that we could have a set of long drawers in which glass tubing could be put. That was the only method that I have ever seen by which we can keep glass tubing clean and keep other things separate. We have other things down in Illinois, and I would be pleased to have any of you passing through Illinois stop and see them, and if the blue prints that I have



EDWIN DEBARR,
State Chemist of Oklahoma.

spoken of will be desirable, I will be glad to mail them to anyone who desires them.

Dr. Mahr of Oklahoma: I would suggest, concerning ventilation, that if the general plan of the new laboratory which has just been built in Michigan and which has been occupied for about a year now, can be looked at, the plan will be of some use to those who are building new laboratories. This laboratory is one of the best ventilated laboratories in the country, and its methods of ventilation are being copied in the new laboratory in Minnesota. The fan is used in forcing the air into the room by conduit, there being no suction to draw it through simply the fan forcing the air into the rooms.

The Chairman: The Chair would like to speak from fairly uncomfortable experiences in the matter of making laboratories adjusted to the work that is to be done. We have not only to provide, I find, for the kind of work to be done, but also the particular volume in which each kind requires to be performed, and in the case of the food analyst that is a very difficult matter to forecast. One week you will

be working possibly on syrups, almost exclusively, the next week on vinegars, and the next week you will have a boxful of miscellaneous things, requiring the use of practically every kind of apparatus you have in the whole laboratory. Many of our appliances, therefore, have to be so arranged that they can be set aside so that they can be kept clean, ready for prompt use when needed. They cannot be put in a fixed position unless we have a much larger amount of space at our disposal than most of us have. I think the most difficult problem we have is to try to make apparatus, tables and closets adaptable to a variety of uses. It is different in special laboratories where certain narrow lines of examination are taken up. In my fertilizing control laboratory I find my conditions radically different from those I have to provide for in connection with food control. I can have long tables and special filter racks and I can save a great deal of time without any sacrifice of accuracy with the use of mechanical appliances that I cannot use at all in connection with my food work. The difficulty with a food analyst is that he has so very much work to provide for in very, very variable portions.

Mr. Bryan of Illinois: If I may speak again, there is just one criticism that I have of the arrangement of desks as suggested by Mr. Loomis. I have noticed it in different laboratories and I have noticed that it was formerly arranged pretty much as he has suggested, two cupboards and one set of drawers in each desk. I find that that proportion is altogether wrong, and that the lower draws are never used, and



SANFORD C. DINSMORE,
Chemist in Charge of Food Control, Nevada Agricultural
Experiment Station.

that the cupboards are crowded. What we really need is about three or four cupboards to one set of drawers, especially if you want to avoid breakage in matters of glassware, having separate cupboards for the storage of glassware. By proper arrangement you will have enough place for the storage of materials without going outside of the laboratory itself. True, you will not have enough room for storing everything, but you will have enough room for storing all that is in actual use, and I think that anyone building a new laboratory should bear that in mind, and calculate as to just what proportion of cupboards to drawers will be needed for the work.

The Chairman: Are there any other remarks upon the subject? If not, the topic next in order will be taken up. The subject is on the Disappearance of Added Formaldehyde in Milk, and it is to be taken up by Mr. M. E. Jaffa and Mr. C. H. McCharles, of California. Are either of these authors present? If not, we will pass that subject for the present and take up the subject, Limits for Added Liquor in Canned Goods, by Dr. R. E. Doolittle, of the Bureau of Chemistry. Dr. Doolittle is not present. Has Dr. Doolittle submitted his paper?

Mr. Bryan of Illinois: No, he has not. He said that he would be present.

The Chairman: We will then defer consideration of this question until the possible appearance of Dr. Doolittle. It will come later in the program. The next subject on the program, as originally arranged, is on Mince Meat Standards, by Mr. Craig Atmore of the firm of Atmore & Son, Philadelphia, Pa.

Mr. Atmore: Mr. Chairman, and Ladies and Gentlemen: I regret to say that on account of having contracted the whooping cough from my children, I will not be able to read my paper, and I will have to ask my friend, Mr. J. E. Ickler, to read my paper. I would also like to state that I have had the address printed, rather roughly, and if anyone cares to have a copy I will be glad to furnish one. Of course, I can converse in an ordinary tone of voice, and I will be very glad to answer any questions that you may wish to have answered.

MINCE MEAT STANDARDS.

By Craig Atmore.

I wish to express my thanks to your President, as well as to the members of this section, for the courtesy you have shown me in permitting me to address you upon the subject of Mince Meat Standards.

While I look at this question from a manufacturer's viewpoint, I have some reason for additional interest, inasmuch as my family have been making and selling mince in Philadelphia since about 1830. During that time we have made only high grade goods, that have been regarded as standard articles by the trade and public, and have uniformly opposed the use of chemical preservatives. We make only mince and plum pudding.

The first step in standardizing is evidently to determine the philological meaning of the term "Mince" or "Mince Meat."

An examination of dictionary definitions shows one point of agreement. The terms "Mince, Mince Meat and Mince Pie" are absolutely synonymous and cannot be interpreted to mean that "Mince Meat" contains meat and that "Mince" does not. To save printing, I shall in this paper use the term "Mince."

Comparison of the various dictionaries develops a very significant difference between English and American definitions. The English dictionaries describe mince as composed of various fruits, etc., and then say, in the Oxford quotation, "And sometimes meat chopped small"; in Starmonth's, "And a small portion of finely cut meat"; in Chambers' "And formerly mutton or veal tongue was an essential ingredient."

The American dictionaries all give practically the same description: "A mixture of chopped meat, suet, apples, etc." In none of them is there a statement that any one of these ingredients is indispensable or of any more importance than any other.

To determine the true meaning of the word, I engaged Professor C. G. Child, of the University of Pennsylvania, to make a special investigation, calling his attention to this apparent conflict. His essay is printed in Appendix B.

His conclusions, which have been indorsed by the highest philological authority in this country, and which coincide with the best English authority, are briefly:

That mince was originally a mediaeval sweet meat, eaten with the meat course, as the other sweet puddings were, but that its use as a dessert during the course of five centuries has changed its character, until fruits are now its principal ingredients, meats being used in small proportions and often omitted entirely. That in England this evolution has progressed further than it has in America.

Mr. Child's conclusions are confirmed by my analysis of domestic and manufacturing practice, and by all the facts in the case.

CLASSIFICATION OF THE ARTICLE.

All cook books classify mince under desserts, along with raisin, lemon and similar pies. I have never seen it classified with meat pies, such as veal or beefsteak pies.

Trade practice confirms this classification, since it was made

first by manufacturers who developed it along with other dessert products, such as plum pudding, was next taken up by preserve and pickle houses, and it was not until approximately 1890 that meat packing houses commenced making it, at the same time they commenced making various other by-products.

Furthermore, it is sold by grocers, bakers and caterers for dessert purposes, is not commonly sold by butchers, and when it is sold by butchers, is recognized by them as being a dessert preparation.

DOMESTIC PRACTICE.

Having determined its philological meaning and proper classification, our next step is the examination into domestic practice as exemplified by cook books.

To do this, I have had a collection of receipts made at the Congressional Library, which is the result of the examination of between 700 and 1,000 books. The elimination of duplicate and freak receipts brought our finished collection to 175 American and 26 English receipts for mince, and 43 receipts for mock mince.

In the opinion of my collectors, this assortment is typical.

It being impossible to include the details in a twenty-minute address, I have analyzed this collection in various ways in Appendix A. The conclusions reached are as follows:

First. That there are in existence from five hundred to two thousand differing receipts for mince.

Second. That any ingredient, any class of ingredients, or even several classes of ingredients, are frequently omitted.

Third. That this has been the practice for over a century, and is not a form of adulteration invented by manufacturers.

Fourth. That there are four classes of ingredients that may fairly be called "necessary," and which are called for in recipes, as indicated by the following percentages: Raisins, including currents, appear in 98 per cent; spices, including salt, appear in 95 per cent; apples appear in 91 per cent; sweetenings appear in 91 per cent.

That there are six classes of ingredients that may be classified as optional and which are called for as follows: Suet, in 83 per cent; wine, cider and vinegar, in 78 per cent; beef, in 76 per cent; citron, in 67 per cent; spirituous liquors, in 57 per cent; oranges and lemons, in 46 per cent.

That the following ingredients appear in from 8 per cent to 2 per cent of all receipts: Jellies and jam, 8 per cent; eggs, 7 per cent; butter, 4 per cent; rose water, 4 per cent; almonds, 3 per cent; cereals, 3 per cent.

That the following appear in less than 2 per cent: Sorghum, maple syrup, canned pears, prunes, dates, figs, candied peels, canned cherries, lemon extract, almond extract, tea, coffee, salt pork, tripe, chicken, rabbit, grape juice, tomatoes.

Fifth. Comparison of English practice with American shows a variation in practice that agrees with the variation in dictionary definition—suet appearing in 96 per cent and beef appearing in 35 per cent of English receipts.

Sixth. That mock or imitation mince nearly always omits beef and suet and includes cereal products, eggs and butter. But that if they are all omitted, or if they are all used, the product usually retains the name—"Mince" and not "Mock Mince."

MANUFACTURING PRACTICE.

The ingredients used by manufacturers are practically identical with our cook-book list.

The principal difference between manufacturing and domestic practices are caused by two factors:

First. The necessity for making an open package goods that will not spoil under trying conditions. This necessitates the use of a greater proportion of ingredients that possess preserving value, and the use of smaller proportions of the ingredients most likely to spoil. It is the general experience that meat is the most dangerous ingredient.

Second. The invention of condensed mince mince, which is a mixture of the dry constituents and sweetening products, pressed into cakes, and which is produced—not by making wet mince and then evaporating the water content, but by omitting the wine, cider, liquor and other liquid ingredients, and using only the solids. It is prepared for the pie, by the addition of 200 per cent of liquid, usually water, and in such pies, it is evident that a valuable class of ingredients, liquors, etc., are missing, because water has been substituted for them. To frame a standard justly allowing for this variation is a very puzzling problem.

All manufacturing formulas call for spices, apples, raisins and sweetening. Meat and suet are generally called for, although in small proportions.

The proportions of meat products used does not coincide

with the proportionate price received or the character or the reputation of the manufacturer.

The adulteration of mince is usually accomplished by the use of improper materials; the abuse of chemical preservatives, and the use in excessive proportions of any of the classes of ingredients.

A standard drawn, simply to regulate mince as it is produced by the manufacturer, would leave a very large proportion of the consumers without protection.

Mince is purchased by the consumer, in its ordinary manufactured forms, from the grocer, and in the form of "mince pie" from the baker.

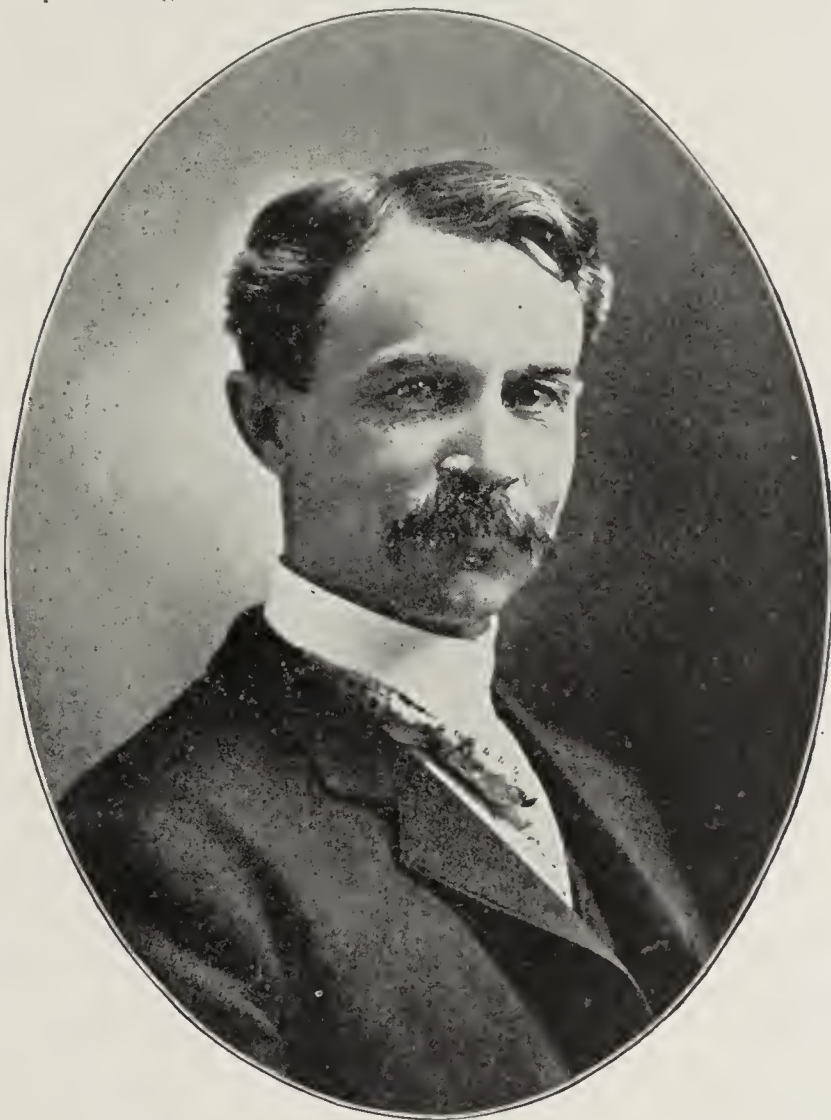
Bakers not only bake pies out of manufactured mince, but many make it themselves, the larger pie bakeries being a large factor in this class.

Furthermore, most bakers, after buying manufactured mince, rework it—condensed necessarily—wet for various reasons.

To regulate bakeries, etc., a standard must be capable of application to mince pie, and its enforcement dependent upon the possibilities of the detection of adulteration of "Mince Pie." As from 35 per cent to 60 per cent is purchased in pie form—this factor and its difficulties must be borne in mind.

It is evident that the quality of mince depends on the materials used, their quality and flavor, the proportions in which they are combined, and the skill of the manufacturer in preparing and combining them, and that all four of these factors must be expressed, if a standard is to be drawn on the same basis as are standards for elementary food products.

It is manifestly impossible to define any of these factors, except the ingredients commonly used, and our study of both



JULIUS T. WILLARD,
Chemist State Board of Health, Kansas.

domestic and manufacturing practice has developed the difficulties of doing even this much.

A standard for mince in the sense of a standard for an elementary food product is therefore impossible, and any standard drawn, must follow dictionary practice in making a flexible definition of the ingredients that are commonly used.

The evils that result from an attempt to write an exact standard are best illustrated by an examination of the Standard of 1908.

The Standard reads:

Mince—mince meat—is a mixture of not less than 10 per cent of cooked comminuted meat with chopped suet, apple and other fruit, salt and spices, and with sugar, syrup or molasses, and with or without vinegar, fresh concentrated or fermented fruit juices or spirituous liquors.

Of this definition it has been asserted, "It is such as will guarantee to the consumer a product of good quality and substantial value." Also, "That a product differing from this definition would be misleading to the purchaser."

Under this standard beef and suet are both required and beef is the only ingredient of which a certain definite percentage is required. On the other hand there is no limit to the kinds or percentages of fruits other than the requirement that apple must always appear. While the presence of all other ingredients mentioned, is required, the use of vinegar, fruit juices, spirituous liquors, etc., is made optional.

Thus we may or may not have in mince:

Vinegar—fresh, concentrated or fermented fruit juices or spirituous liquors and practically all fruits.

We must have in mince:

Ten per cent of cooked beef.

Suet.

Apples and one or more other fruits.

Salt and spices.

Sugar, syrup or molasses.

If any of these ingredients are omitted, it is legally no longer "mince." For instance, if salt is omitted—or only one spice instead of several, or if 9 per cent of beef is used instead of 10 per cent.

Conversely making optional the use of vinegar, fruit juices or spirituous liquors, legalizes as mince a mixture of the dry materials that probably cannot be found in any cook book. Such things appeal to the manufacturer as being ridiculous and contrary to common sense. Raisins, the most common ingredient, are not even required.



E. L. REDFERN,
State Chemist of Nebraska.

Keeping these curious effects in mind—let us see whether under its provisions a customer buying a sealed can of mince would have a clear idea of what he is getting.

We have already seen that he could not tell whether he was getting vinegar, fruit juices, or spirituous liquors. He will not know what other fruits have been used besides apples; no statement for his information being required and no limit placed on them. As the fruits in this class plus the liquor commonly form about forty per cent of the total body, and their inclusion or omission totally changes the nature of the product—we are unable to understand how this "Standard" insures to the customer, a knowledge of what he is getting, how the product could be changed more in its character by the omission of any of the required materials than it is by the omission of the optional materials, how it guarantees a product of good quality and substantial value when the use of 40 per cent or more of the most valuable ingredients is made optional without the requirement of a statement of their omission on the label.

Not only is the customer not insured either the perfect product or that full knowledge that he should have—he is actually deceived by the requirement of 10 per cent of cooked beef, which is obviously intended to insure a customer getting that meat content in mince in the form in which it is consumed.

The deception is caused by the omission in the Standard of

a provision that when vinegar, etc., are omitted, leaving practically only the solid ingredients, to which of course some liquid must be afterwards added to make ordinary mince, that any required percentage should be automatically increased so that the percentage would be maintained uniform in the natural product.

Accordingly there being no provision in the Standard to prevent it—condensed mince need only contain 10 per cent of beef the same as wet mince. Adding twice the weight of liquid to the condensed, of course, reduces the percentage of beef to 3½ per cent in the final form in which it is alone comparable to wet mince, which is required to contain 10 per cent. This results in unnecessary deception of the consumer, especially that very large class that buys its mince in the form of mince pies and which consumption we have estimated as at least 35 per cent of the total.

Furthermore—this 10 per cent provision as phrased works a great hardship on the manufacturers of wet mince as compared with the manufacturers of condensed mince. It is a matter of great difficulty to put more than 4 per cent of cooked beef into wet mince, and retain at the same time the delicacy of flavor and the keeping quality.

A 10 per cent content in wet mince is excessive—it being nearly impossible to make goods with that content that can be sent into consumption through ordinary commercial channels and the mince that results is almost of necessity an inferior article as well as a dangerous one.

On the other hand it is perfectly possible, although equally undesirable, to put 10 per cent of meat into condensed mince. It is more difficult to make condensed mince with 30 per cent of meat than wet mince with 10 per cent.

This 10 per cent provision is not only misleading to the consumer, but an injustice to those manufacturers who make wet mince. The most exhaustive examination of all sources of information shows conclusively that there is nothing to justify this requirement, and I feel confident that I can produce such overwhelming evidence against it that no reasonable person would sustain it.

The standard as drawn and interpreted therefore is ridiculous in some of its features—does not insure the consumer the full knowledge that he should have, deceives and misleads the consumer by its 10 per cent beef requirement, and discriminates against one class of manufacturers more than it does against another class.

In conclusion, the problem of standardization of mince is in the sense of the standardizing of elementary drugs or foods an impossibility. I therefore earnestly beg your consideration of the question whether this being the case the effort should not be abandoned.

Should you, however, decide that some "standard," even though incomplete, should be drawn, I beg to offer the following suggestion, which although a crude one, would give us a standard that would be a great improvement over the present standard and meet most of the difficulties that have presented themselves.

My idea is to classify the ingredients of "mince" according to their functions and character.

Taking the list of ordinary ingredients as used by manufacturers and classifying them to meet our requirements we would have:

- A. Meat products—Meat as used for food—suet.
- B. Apple products—Fresh apples, dried apples.
- C. Dried fruit products—Raisins, currants.
- D. Seasoning products—Spices, including salt.
- E. Sweetening products—Sugar, syrup, molasses, corn syrup.
- F. Flavoring products—Fruit juices, variously described; candied or citrus fruits; wine; water.
- G. Preserving products—Vinegar, spirituous liquors, legally permitted chemical preservatives.
- H. Cereal products—Starch, flour.

It would be my idea to require the presence of at least one of each of these classes of ingredients, in any article labeled, "Mince," "Mince Meat" or "Mince Pie," with the exception that cereal products shall only be used in condensed mince, and that the entire omission of the flavoring and preserving classes shall be permitted in condensed mince.

That, excepting only spices, not less than 1 per cent nor more than 75 per cent of any one ingredient shall be used.

That the names of the ingredients used shall be printed plainly on the label.

This standard would not assure the purchaser good mince—no standard can do that—it would, however, assure him the presence of at least one of each necessary class of ingredients, it would tell him what he was getting and would be just and fair to all manufacturers.

Should you feel this to be impossible, I ask as mere justice to the trade, the reclassification of mince as a dessert in-

stead of a meat product and the omission of the 10 per cent requirement which is not warranted by any practical, ethical or legal consideration.

The Chairman: Dr. Ladd of North Dakota has been asked to open the discussion on this subject. Dr. Ladd.

Dr. Ladd of North Dakota: Mr. Chairman and Members of the Association. I do not think that I follow very closely on what the gentleman has said, but rather I discuss the subject from the standpoint of some work that we have been doing during the past year. The discussion of some of the questions that have been raised would require a great deal of time and there would be a difference of opinion and would not perhaps be satisfactory at this time. My subject is:

MINCE MEATS AND THEIR COMPOSITION.

During the past ten months we have had occasion to make quite an extended investigation of mince meats as found upon the markets in the state of North Dakota. In this connection fifty-one samples, representing practically all of the mince meats found in the state, were subject to analysis and micro-chemical studies. The wide differences found in the various mince meats upon the market made this course seem necessary in order that we might determine what, under the North Dakota law, should constitute or be entitled to the name of mince meat without any further qualifying phrase. The dictionary definition for mince meat is:

"A mixture of chopped meat, apples and suet with dried fruit, spices, etc., used as the filling of mince pie."

The standard as laid down by the Association of State and National Food and Dairy Departments defines the product as follows:

"Mince, mince meat, is a mixture of not less than ten (10) per cent of cooked, comminuted meat, with chopped suet, apple and other fruit, salt and spices and with sugar, syrup or molasses and with or without vinegar, fresh, concentrated or fermented fruit juices or spirituous liquors."

This at once raises the question as to whether or not we should have minimum standard for food products. I am aware that there are many manufacturers who would not have any kind of standards established. With these I cannot agree. I would not exclude from sale any product to be used in the manufacture of pie as a substitute for mince pie which of itself contained no harmful ingredient or ingredients. On the other hand, the public have a right to know that a product is above a certain minimum standard, in the purchase of mince meat, as fully as I believe they have a right to know that milk contains at least a minimum amount of solids and fat, and that it has not been skimmed to remove a portion of the cream or butterfat. Having a minimum standard for fat and solids in milk does not legalize the skimming of milk high in solids and fat in order to bring it down to the minimum standard, but it does define how poor a product may be sold in its normal condition as milk.

In the case of mince meat the reasons for a standard are even more pronounced than in the case of milk, cream or butter. Such a standard, as has been suggested, does not establish a maximum degree of excellence for mince meat, but does define the minimum standard below which any product shall fall and be classed as mince meat. Products which contain other constituents foreign to recognized mince meat or which contain less meat than the standard calls for can still be sold under their own appropriate name if a statement is made as to the per cent of meat present, as well as the per cent of any foreign ingredient or substance which is not generally recognized as a constituent of mince meat. In making this statement I am keeping in mind the requirements of the North Dakota Food Law.

The details for the fifty-one analyses are too many to be followed in a paper at this time. I only propose to point out a few of the findings and to classify the mince meats into three groups based, first, upon the per cent of meat contained therein.

Nineteen of the fifty-one mince meats contained no meat whatsoever, or less than 1 per cent of meat fibre. In this statement I am not including the suet or fat. Eighteen samples contained from 3 to 6 per cent of meat fibre; while fourteen samples were found to contain from 6 to 10 per cent of meat fibre. Our examinations included both the so-called wet mince meats and the condensed.

Seven of the samples contained glucose ranging from 10 per cent to 43 per cent; that is, there were two groups, those which contained approximately 10 per cent of glucose and those which contained above 40 per cent, or, considerably

more, in the last case, than one-half of the total solids were in the form of glucose. Twenty-three of the samples contained added cereals in determinable quantity, usually either corn or wheat flour.

There can be no necessity for the addition of cereals to wet mince meat. The condensed mince meats were found to contain cereals in varying quantities, usually less than 5 per cent, often less than 3 per cent, put there, as claimed by the manufacturer, not for the purpose of adulteration or cheapening the cost, but to take up the moisture and prevent the staining of the carton. I am convinced, however, that if cereals are used at all for the purpose of taking up the moisture and prevent the staining of the carton, the amount need not exceed 2 per cent, but the presence of this product should be declared upon the label, as should also the presence of glucose and its per cent.

The mince meats containing above 40 per cent of glucose contained no meat fibre whatever; on the dry basis the amount of sucrose varied from 0.25 of 1 per cent to 35.6 per cent; the amount of invert sugar from 14.5 to 80.5 per cent. It is



HERMAN HARMS,
State Chemist of Utah.

clearly evident, therefore, that in a preparation of this kind there could not have been very much of meat, for all were found to contain fruit in considerable quantity.

While the per cent of fat on the dry basis varied in the samples from 0.56 of 1 per cent to 14.1 per cent.

Our further consideration will now be given in the main to the protein compounds calculated on the dry basis, since it is to a study of the protein compound that we must largely look to determine to what extent meat or meat fibre is present.

Class 1: Those mince meats containing less than 1 per cent of meat fibre, included 19 samples. In the following table I present the maximum, minimum and mean composition of these samples:

TABLE I.

Sample	Per cent						
	Total Protein	Insoluble Protein	Soluble Protein	Protein	Ether	Sucrose	Invert sugar
19.							
Maximum	2.42	1.69	1.11	48.40	9.60	35.60	80.50
Minimum	.837	.767	.07	7.30	.62	.25	14.50
Mean	1.59	1.20	.44	25.30	1.98	15.19	37.90

Since lean meat has been found to contain, on the dry basis, approximately 50 per cent of insoluble protein, and that from 15 to 20 per cent of the total protein is soluble in water, and those so-called mince meats which contained no meat whatever were found to have insoluble protein ranging from .87 per cent to 1.14 per cent, in other words, then, it would

seem safe to conclude that any appreciable amount of insoluble protein above 1 per cent is due to meat, unless other abnormal constituents rich in protein had been added and which would be detected by the microscopic examination.

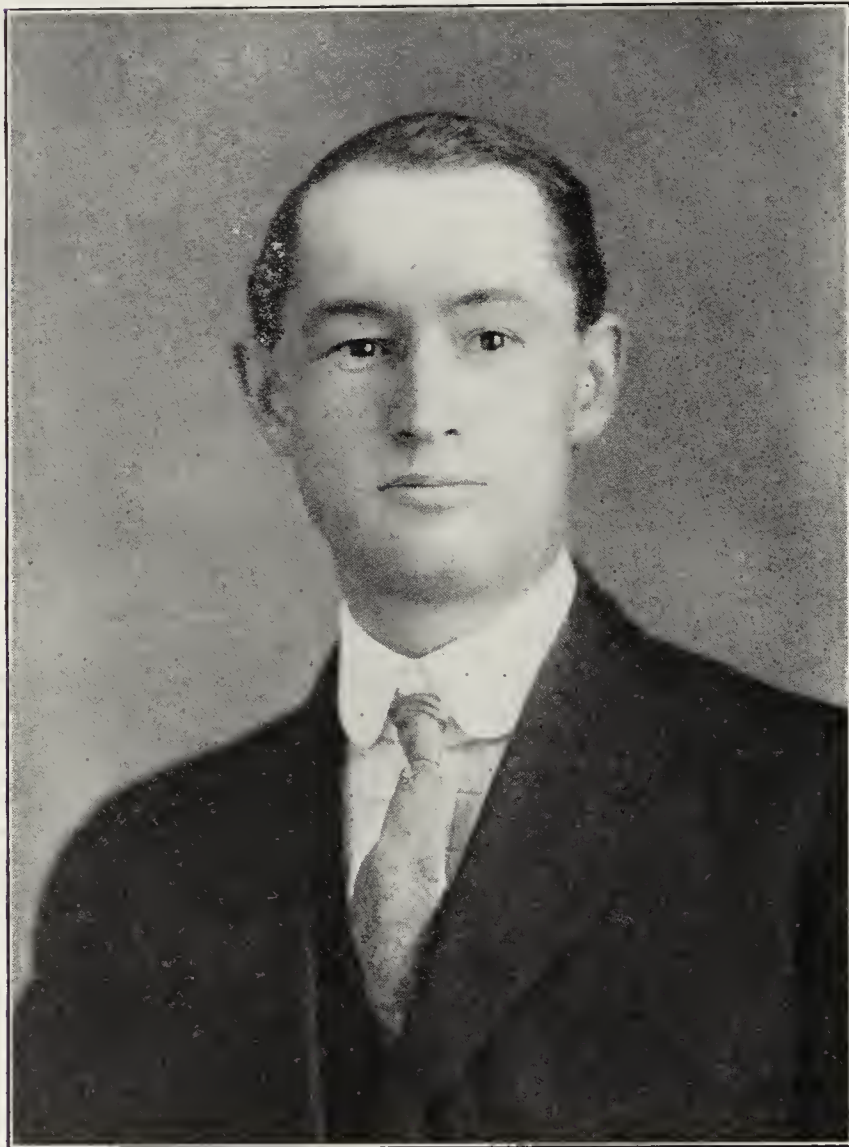
Since, as is noted above, meat fibre on the dry basis contains approximately 50 per cent of insoluble protein, therefore, the per cent of meat in a given sample may be calculated from the following formula, assuming that the cooked beef contains an average of 5 per cent of moisture.

$$\text{Meat} = \frac{2.2 \text{ B. X T. S.}}{100}$$

100

B. = Meat, dry basis.
T. S. = Total Solids.

This method of calculation, as shown by actual experiment, will yield in general rather higher results for meat than the actual meat added; thus, when to the three mince meats reported upon, as containing no meat, there was added on the average 3 per cent of meat fibre, the amount of meat recov-



CLAUDE MASON,
State Chemist of Idaho.

ered by this formula was 3.6 per cent. The results are, therefore, somewhat higher than the truth, giving the manufacturer the benefit of the doubt in each case, as it should be.

Mince meats containing from 3 to 6 per cent of meat in the original sample included 18 samples with results as follows:

TABLE II.

Sample	Per cent						
	Total Protein.	Insol- ible Protein.	Sol- ible Protein.	Pro- tein Sol- ible.	Ether tract.	Su- crose.	Invert sugar.
18.							
Maximum	4.42	3.28	1.49	38.40	14.10	27.40	70.50
Minimum	2.04	1.73	.07	3.40	.56	.15	21.01
Mean	3.16	2.48	.68	19.90	4.35	18.15	36.90

In the same manner taking the mince meats containing from 6 to 10 per cent of meat in the original sample, 14 samples in all, we have the following:

TABLE III.

Samples	Per cent						
	Total Protein.	Insol- ible Protein.	Sol- ible Protein.	Pro- tein Sol- ible.	Ether tract.	Su- crose.	Invert sugar.
14.							
Maximum	5.79	4.88	1.72	30.50	12.60	35.10	68.40
Minimum	3.37	3.41	.02	.52	.92	.60	22.70
Mean	4.45	3.97	.47	9.71	5.66	11.80	43.10

Again, if we combine the results for the entire 51 samples, the maximum, minimum and mean for the samples will be indicated as in

TABLE IV.

Sample	Per cent						
	Total Protein.	Insol- ible Protein.	Sol- ible Protein.	Pro- tein Sol- ible.	Ether tract.	Su- crose.	Invert sugar.
51.							
Maximum	5.79	4.88	1.72	48.40	14.10	35.60	80.50
Minimum	0.83	0.77	0.02	0.52	0.56	0.15	14.50
Mean	2.93	2.40	0.54	19.16	3.82	15.31	38.98

The detailed results for the foregoing analysis may be found in Special Bulletin 5, Vol. II, North Dakota Food Department, on page 81, and Prof. Wright there points out that from 15 to 20 per cent of the total protein in meat is soluble in water, and the three samples of admittedly compound or imitation mince meat, containing no meat fibre, contained of soluble protein from 7.3 to 8.4 per cent. Therefore, it may be taken as an indication that meat extract has been added, when the soluble protein is greatly in excess of 20 per cent of the total protein, or in case meat fibre is absent, 15 or 16 per cent would indicate that meat extract had been added. If this factor runs very low, that is, below 10 per cent, the natural conclusion would be that the extractive had been removed. On this point, however, considerable more work should be done. Any appreciable amount of insoluble protein above 1 per cent, dry basis, would be deemed as due to the presence of added meat fibre unless, as already pointed out, some foreign product rich in protein had been used, as in the case of one sample where green tomatoes had been largely employed. The writer is, therefore, of the opinion that no injustice would be worked on the honest manufacturer of mince meats if a requirement of 10 per cent of meat were made in standard mince meat; that for the protection of condensed mince meats to prevent their leaking or staining the carton not to exceed 2 per cent of cereal is necessary. The writer is further convinced that where other constituents or ingredients than those generally recognized as being a part of mince meat are used, their presence should be clearly indicated, and the product should have some qualifying name to distinguish it from standard mince meat. Thus, the term "Summer Mince Meat" or "Mince Meat Compound" might be employed to indicate that the mince meat differs from the standard, providing, of course, that the label showed the product to contain no meat and that it was made wholly from fruits with the usual syrup and condiments.

The writer is particularly interested to know whether it should be considered permissible to use cereals and to what extent in the preparation of condensed mince meats.

The Chairman: The subject is open to general discussion.

Mr. Willard of Kansas: I do not care to discuss the question very much, but I believe that we are under obligation to manufacturers for such papers as we have had read on the subject this afternoon. We have found in Kansas that we have profited greatly by friendly conferences with manufacturers, ascertaining their point of view, and the conditions, and so on, and I believe that we have far less trouble in guarding the interests of the public by following this course, especially in the case of materials like compound food.

We have had the same sort of question with sausage and other things, and for my part, I am unable to see how a fixed standard could be adopted for anything like mince meat. I am glad to note the manufacturer stating that the product is put on the market in competition. That is a point which a good many manufacturers are disposed to face, and they frequently wish to put out their goods and sell them on their merits without giving any information as to what they contain, and on my own part, in all of our food legislation and standardization and discussion I have always taken the view that the most important thing is for the consumer to know what he is getting. Of course we should exclude the sale of positively detrimental things, but aside from that the most important thing is to let one know what he is getting and

not attempt to bind business into exceedingly narrow channels, but to let everything be open and above board with respect to what the ingredients are, and what it is. For my part I would be well satisfied if everything were so marked that I would know what I was getting. If you are able to get that far with mince meat you would be doing very well indeed.

Mr. Atmore: In regard to the standard, I may say that the standard is simply a copy of the Association standard. I would like also to say that I will be at the Savoy Hotel where I have a great number of these books and I would be pleased to furnish copies to anyone who desires them, and I shall also be glad to answer any questions that may want to be answered.

The Chairman: The Chair would like to ask the pleasure of this section of the Association now. We have covered the subjects proposed for this afternoon except one by the Chair, who has already addressed you once and prefers not to weary you by a too frequent repetition of remarks, and we have had several subjects discussed which were not placed upon this afternoon's program. The hour is 4:30. Is it your pleasure that we proceed with the subjects scheduled for a later time, or shall we adjourn now to some fixed time tomorrow?

Mr. Allen of North Carolina: It would be well to get along as rapidly as possible and I would suggest that we continue for some little time. That is just my opinion.

The Chair: Whatever the body prefers, that is what I wish to ascertain.

Mr. Bryan of Illinois: I have no objection to continuing, except that in the order in which the program is put together we have two or three subjects which naturally go together, and the papers should be read at the same time, so that the parties delivering the papers should discuss them. We have a paper sent by Mr. Harrison on the interpretation of vinegar analyses which I had intended to read, but Mr. Doolittle has a paper on the same subject, and it seems very desirable that we have the discussion of those two papers at the same time. The next paper on the program is one with reference to apparatus for milk determination, and we have some papers in regard to that, and those things ought to be here and they are not.

Mr. Allen of North Carolina: That being so, it seems to be not feasible to continue.

The Chairman: What is the pleasure of the body? Shall we go on with the program as well as we can at the present time? There are certain papers that we expected to have that are not on hand this afternoon. Shall we adjourn?

Mr. Harris of Utah: I move that we go on with the program.

The Chairman: Is that motion seconded?

Mr. Allen of North Carolina: I second the motion, providing those two papers can be omitted, Dr. Doolittle's and Mr. Harrison's, or any that depend upon other papers, and take up such as can be discussed now.

The Chairman: You have heard the motion. Those in favor say "Aye;" contrary, "No." The motion is adopted. I will now read my paper, that is, if I am introduced by the temporary chairman, who is to be Mr. Bryan.

Mr. Bryan of Illinois: I thought perhaps that the chair would introduce the temporary chairman. Having been thus introduced I now take pleasure in announcing the next paper on the program by Dr. William Frear of Pennsylvania, on Duties of a Food Chemist as a Witness for the State.

Mr. Frear: Mr. Chairman, and Ladies and Gentlemen: The subject on the program, whether the right subject or not, I cannot say now, but the subject that I have tried really to write about is slightly different, although it covers a great deal of the same ground. The subject which I have written about is:

THE ATTITUDE OF THE OFFICIAL CHEMIST AS WITNESS.

In the ordinary sequence of events, the findings of adulterations or misbranding, reported by the official chemist, must, sooner or later, be related by him upon the witness stand before a magistrate or in some court of higher jurisdiction. The conduct of the Official Chemist, when thus called as the expert on behalf of the commonwealth, may do much to make stronger the public sense of the importance of the pure food work, and to increase confidence in the skill and fairness with which the food and drug control laws are being enforced, or may, on the other hand, seriously weaken the public appreciation and support for the work.

It is desirable for these reasons, that this phase of the official chemist's work, should receive from him a consideration out of proportion to the time it occupies in the sum total of his duties.

It is not my purpose to attempt, at this time, any extended discussion of the functions of the expert witness in general—a subject to which an entire book might well be given. Your attention is directed particularly to certain points important because of the public service relation of the official chemist.

In this relation, it should scarcely need to be stated, he should be actuated by no private motive save those of loyalty to the public welfare. He has not come to court to recover compensation for personal loss, or injury; he is not even the prosecutor in behalf of the public. He has borne the responsibility of acting as the judge of the facts, in so far as they involve expert knowledge, and in that relation has been intent only upon discovering the truth; in other words, has been acting impartially between consumer and producer. When, as the result of an earlier report of his findings, a prosecution has been instituted, and the official chemist is cited as a witness to relate these findings, there is all good reason for his continuing to regard himself as under obligation to observe, in this new relation, the same obligation of impartiality that has rested upon him during the period of his study of the facts in question.

I desire to emphasize the importance of deliberately fixing upon this conception of the commonwealth expert's function and of the attitude appropriate thereto, and of consistently adhering to the line of conduct corresponding. For any other conception of his duty is repugnant to the common idea of justice. The average appreciation of fair play is sufficiently alive in the breasts of judge and jury to give rise to resentment when the powers of public office are used to subvert the defendant's right to fair treatment. The result is inevitably a loss not only of good repute to the official witness, but, what is more important, a weakening of the public support for the cause he represents.

What I had just said implies that this conception of the official's function when serving as an expert witness on behalf of the public, is not always held, and the corresponding attitude may not always be easy to maintain.

Part of the difficulty rose out of the fact that the expert upon whose findings the case has been instituted, finds himself in the hands of the cross-examiner, apparently as much under attack and criticism as the real defendant; and the impulse to take the offensive-defensive, sometimes awakens very suddenly, and required a stout hand upon its leash. The case should not be brought except upon evidence that will bear a searching cross-examination; so there should be no objection to that, but rather a cordial welcome. The more fact that it may be conducted in a tone of studied discourtesy or of abuse unfortunately intended should not provoke the commonwealth's expert to an abandonment of his smiling calm. Discourtesy met by imperturbable courtesy is always at a disadvantage with court and jury. The business of the witness is not the exhibition of his dignity, his skill at repartee, nor his superior knowledge, but simply that of telling the truth, in so far as the rules of evidence make it pertinent.

The expert responsible for the findings of fact and the opinions upon which the case is brought, is naturally desirous of establishing the facts, as he sees them. Here, however, he must depend upon proper examination by the counsel for the commonwealth to elicit the facts. Any manifest impatience with, and attempt to disregard the orderly movement of the usual court procedure, must bring upon the witness well earned ridicule and discredit. Further, yielding to the temptation to supplement the examiner's questions by eager, volunteer testimony, must in the end, make the witness seem to have the animus of a private prosecutor, with a resulting weakening of his credibility. The same result follows the exhibition of any apparent lack of frankness, any manifest evasiveness, any disposition at quibbling in the cost of cross examination. Even the laudible desire to be perfectly exact, may, if the witness is not careful of his manner, lay him open to suspicion of unfairness in cross-examination.

There are two tendencies against which official experts need especially to be on guard. The first is a feeling that a statement of fact, or opinion made by them in their official capacity, should be accepted, not simply as *prima facie* evidence, but as conclusive proof. Pride of office has its proper place in keeping the officer up to high standards of conduct, but is most unfortunate if it betray him into any manifestation of arbitrariness. His official relation has nothing to do with the facts; it merely impresses upon the expert the necessity for more care, if possible, in making sure of the truth as to the facts, before making report thereupon. The second tendency is to pretend to omniscience, and infallibility. To the knowing, the pretense is ridiculous; and to hoodwink the credulous for any great length of time, requires unusual skill. If you come upon the witness stand often, you are sure to meet questions you cannot know enough to answer. Probably

a frank avowal of lack of experience as to the particular matter, will have little bearing upon your credibility on the subject really at issue. Even though the truth may afford some temporary comfort to the defense, there is no consideration that can justify you in withholding you.

If facts develop that even upset your view of the case, first make sure of the facts, and then be fair. It is important for the sake of justice that no case be won against the facts. It is far nobler to be fair than to seem infallible.

There is another condition—other than the personal tendencies just suggested, and the common tendency of mankind to take easily to partisanship—that makes the attitude of impartiality easy to forsake. This condition rose out of the mode in which evidence is presented and the relations under which the official expert takes the stand. The theory of court procedure is that, subject to the ruling of an impartial judge, the facts shall be presented by prosecution and defense as they respectively understand them, and be elicited by interrogation by officers representing the respective sides to the controversy—officers sworn to the cause of justice. In practice, however, the tendency is for each such officer to welcome only such testimony as supports his own contention. This is very human, and however much we may regret the tendency, we, too, are human; therefore, we should not be too hasty in judgment. The atmosphere of the court room readily affects the witness, however, and he must keep his insulation whole if he is to avoid being positively or negatively electrified, and having his testimony distorted accordingly. It must not be supposed that the cause of justice is necessarily made crooked by this condition of the court room air. The tendency works both ways; but the expert witness who allows his compass to be deflected from the north star of impartial truth will have lost credit for himself and the cause he represents.

The official witness should even guard against the appearance of prejudice and partisan zeal. It is wholesome for him to keep away, if this can be secured, from the table of the prosecuting officer, and that he be relieved from the duty of openly prompting that officer for the examination of experts called by the defense, at least in cases where the witness himself is called upon to give the crucial testimony for the prosecution.

I shall not, however, weary you with further suggestions of detail. Many of the bridges cannot be crossed beforehand, even in imagination, because we do not know they are in existence. Let me conclude with this simple declaration: We are not witnesses so much to secure conviction in cases as to secure the public conviction of the justice and importance of our cause.

Mr. Bryan of Illinois: Is there any discussion of this paper? I surrender the chair to Mr. Frear. (Mr. Frear takes the chair.)

The Chairman: The next subject on the program as originally arranged is a round table on laboratory records for the official food laboratory. Is Mr. Redfern in the room? He was here a little while ago, but I see he has left, so we shall pass that part of the program for the present. Is Dr. Price in the room? I see he is not. I believe, gentlemen, that just about covers all that we are in a position to act upon this afternoon, in view of the absence of some of the speakers and in view of the absence of some of the papers. The meeting is in your hands.

Mr. Allen: If we cannot do anything else, I move that we adjourn.

The Chairman: Until tomorrow afternoon at two o'clock. And how about this place? Will we be able to get the same room?

Mr. Allen: It is not tomorrow afternoon; it is Thursday afternoon.

The Chairman: We wish to hold some session tomorrow afternoon, because there are some matters that ought to be discussed before tomorrow evening.

Mr. Allen: I don't know how we can arrange that. The program does not call for a meeting of your section tomorrow afternoon, and we have not arranged for a stenographer to be present.

The Chairman: Part of the work that we have in mind does not require a reporter to be present.

Mr. Allen: I do not see any objection to you holding a meeting that would not require the services of a reporter. As you know, the program was originally arranged for each section—each section to hold a meeting on certain afternoons, and we had to arrange the program so that we would have but two sections meeting at the same time, instead of four, as we do not have the money to pay for the services of a reporter at the four meetings.

The Chairman: The chair would suggest that the subjects set for discussion at three o'clock tomorrow can, of course, be discussed without the services of a reporter.

Mr. Bryan: I see there are two round tables, according to the program.

Mr. Allen: They might come up tomorrow afternoon.

The Chairman: As to formal papers, the services of a stenographer are not required as much as at a round table. The formal papers can easily be copied.

Mr. Allen: That is my opinion also.

The Chairman: Is there any reason, Mr. Allen, why we cannot use this room tomorrow? Is this room required for any other section tomorrow afternoon?

Mr. Allen: If you prefer this room, there are other rooms that can be used by the other sections.

The Chairman: The chair will announce that a meeting will be held tomorrow afternoon at two o'clock in this room, unless there are some other arrangements which will be announced at tomorrow morning's session. There will be a meeting then before four o'clock on such subjects as will least require, or at least will not be injured by the absence of a stenographer. The meeting is adjourned.

WEDNESDAY, JULY 10,

2 P. M.

The Chairman: The meeting will please come to order. The first paper that we have this afternoon is that On the Disappearance of Added Formaldehyde in Milk, by Messrs. M. E. Jaffa and C. H. McCharles of California.

ON THE DISAPPEARANCE OF ADDED FORMALDEHYDE IN MILK.

M. E. Jaffa and C. H. McCharles.

The question has often been asked of late how old may milk be which has been preserved with formaldehyde and still show the presence of this preservative. It has been claimed by a good many that after a few days it will not be possible to detect the original addition of formaldehyde to the milk. In view of this discussion it was decided to make some experiments along this line.

Two samples of certified milk were taken—one from the University of California Dairy, Berkeley, and one from the Timm Dairy at Dixon, Cal. Four dilutions were made with each milk:

1 : 25,000	1 : 8,000
1 : 10,000	1 : 5,000

These experiments were started on the 8th of January, 1912. The samples were placed in 8-ounce tinctures four-fifths full and kept at a temperature of 65° Fahrenheit.

Table 1, here presented, summarizes the results of the work.

The milk from the University Dairy showed positive test for formaldehyde on the 19th of January—the sample being eleven days old. On the 21st of January, two days later, the test showed negative results.

In the case of the Timm Dairy, the sample 1 : 25,000 showed a positive result when the sample was thirteen days old, and negative afterwards. In both samples the dilution 1 : 10,000 showed a positive test for thirty-eight days after the experiment was started, that is, on the 15th day of February.

Owing to a great pressure of routine work and rush of the students, the samples were not tested again for over three weeks, at which time the dilution 1 : 10,000 showed negative results in both samples.

The Timm milk, 1 : 8,000 showed positive test on the 61st day. In both milks the sample 1 : 5,000 showed positive results on the 103rd day. That is, on the 20th of April, when last tested.

It would appear from these results that it is possible to ascertain the presence of added formaldehyde to milk with a dilution of 1 : 10,000 when the milk is at least thirty-eight days old and probably will show the test for a few days longer. In the cases of milk where the preservative has been added in the proportion of 1 : 5,000 of milk, it can be easily detected if the sample is three months old. The method used in this investigation was what is known as the Leach test or the hydrochloric acid test, which is as follows:

Commercial hydrochloric acid (specific gravity 1.2) containing 2 cc. of 1 per cent ferric chloride per liter is used as a reagent. Add 10 cc. of the acid reagent to an equal volume milk in a porcelain casserole, and heat slowly over the free flame nearly to boiling, holding the casserole by the handle, and giving it a rotary motion while heating to break up the curd. The

TABLE I

Designation of Sample and Dilution	Dates and Results of Tests. Temperature 65° F.													
	January							February		March		April		
	8	12	15	19	21	24	29	5	15	9	29	3	16	20
University of California Dairy Formaldehyde added Jan. 8														
1 : 25,000.....	pos	pos	pos sour	pos	neg	neg	neg							
1 : 10,000.....	pos	pos	pos	pos sour	pos	pos	pos	pos	pos	neg	neg			
1 : 8,000.....	pos	pos	pos	pos	pos	pos	pos	pos	pos	neg	neg			
1 : 5,000.....	pos	pos	pos	pos	pos sour	pos	pos	pos	pos	pos	pos	pos	pos	pos
Age of sample, days.....	0	4	7	11	13	16	21	28	38	61	81	86	99	103
Timm Dairy, Dixon Formaldehyde added Jan. 8														
1 : 25,000.....	pos	pos	pos sour	pos	pos	neg	neg							
1 : 10,000.....	pos	pos	pos	pos sour	pos	pos	pos	pos	pos	neg	neg			
1 : 8,000.....	pos	pos	pos	pos sour	pos	pos	pos	pos	pos	pos	neg			
1 : 5,000.....	pos	pos	pos	pos	pos sour	pos	pos	pos	pos	pos	pos	pos	pos	pos
Age of sample, days.....	0	4	7	11	13	16	21	28	38	61	81	86	99	103

presence of formaldehyde is indicated by a violet coloration, varying in depth with the amount present. In the absence of formaldehyde, the solution slowly turns brown. By this test 1 part of formaldehyde in 250,000 parts of milk is readily detected before the milk sours. After souring, the limit of delicacy proves to be about 1 part in 50,000.

Various aldehydes, when introduced into milk, give color reactions under the above treatment, but formaldehyde alone gives the violet coloration, which is perfectly distinguishable and unmistakable.

TABLE II

Designation of Sample Diluted 1 : 10,000 Jan. 19, 1912	Dates and Results of Tests. Temperature 75° F.				
	February, 1912				March
	1	5	15	20	9
Univ. of Cal. Certified 4 oz. tincture stoppered, one-third full...	pos	pos	pos	neg	neg
Univ. of Cal. Certified Pint bottle unstoppered, three-fourths full..	pos	pos	pos	neg	neg
Market Milk 4 oz. tincture stoppered, one-third full.....	pos	pos	pos	neg	neg
Market Milk Pint bottle, unstoppered, three-fourths full.....	pos	pos	pos	neg	neg
Age of sample, days.....	13	17	27	32	51

The statement has also been made by some that if a small amount of milk to which has been originally added formaldehyde for the purpose of preserving, is kept at a temperature of 75° Fahrenheit that it will be impossible to detect such addition to the milk after the sample is two weeks old. It is stated by those who hold to this view that the formaldehyde would have so completely disappeared by combination with compounds occurring normally in the milk, that no positive reaction can be obtained by the Leach test, even though there had been added originally enough formalin to the milk to cause serious digestive disturbances in infants and invalids. In order to test whether or not such a statement were true, further experiments were carried out. Two one pint bottles of milk were obtained, one certified and the other an ordinary market milk. These were both treated on the 19th of January, 1912, with formaldehyde to the extent of 1 part to 10,000. The samples remained open until the next morning, January 20th, when they were poured from one vessel to another fifteen times, then allowed to remain open until the next day, or the 21st of January. On that day 50 cc. of each sample were transferred to separate four ounce tinctures. The tinctures being stoppered. The remainder of the samples was left in the open pint bottles. The four bottles—two pint bottles and two tinctures, were kept at a temperature of from 75 to 85° Fahrenheit and tested from time to time by the work in this direction. It indicates that there was no

the Leach method, as above indicated. Table 2 summarizes difference in time with reference to the disappearance of the formaldehyde from the milk, and that all four samples, large and small showed positive tests when the samples were twenty-seven days old. Negative results when the samples were thirty-two days old, it, therefore, must be concluded that the formaldehyde does not disappear from the milk until the milk is four weeks old, even though it be kept at a temperature of from 75 to 85° Fahrenheit, and during which period can easily be detected by a proper application of the Leach test.

The Chairman: The next thing on the program is a paper written by Mr. G. R. Stewart of California entitled "On the Determination of Fat in Ice Cream."

[Mr. Stewart's paper will be printed in the August number of the AMERICAN FOOD JOURNAL.]

Mr. Chittick stated that investigation showed the reliability of the HCLAc centrifugal method for the determination of ice cream.

Mr. Frear stated that the accuracy by this method in the presence of gelatin, gums, dextrin, eggs, starch and sugar was satisfactory and gave comparable results.

The secretary then read the paper of Mr. William Brinsmaid of Illinois, on Apparatus for the Determination of Fat by the Roese-Gottlieb Method.

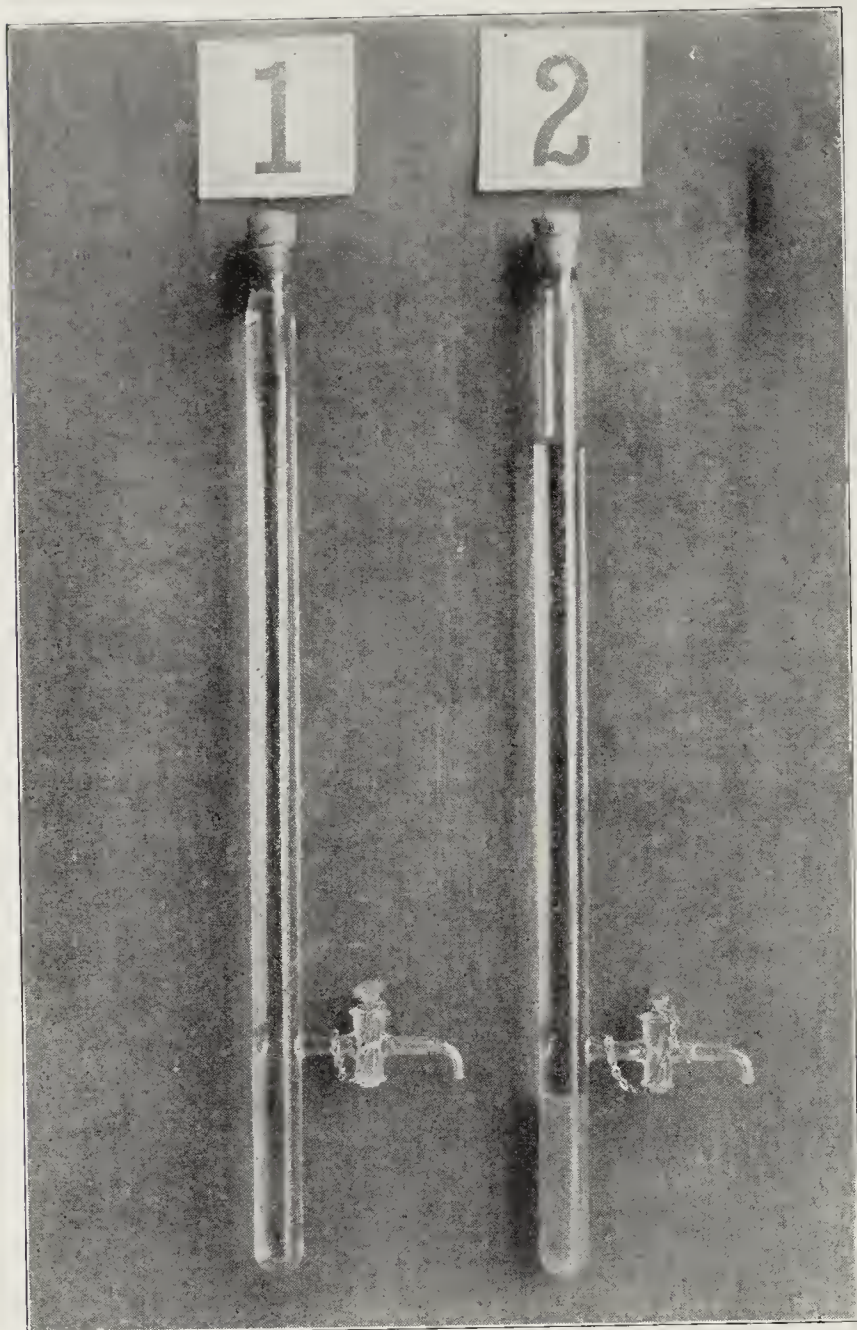
APPARATUS FOR THE DETERMINATION OF FAT BY THE ROESE-GOTTLIEB METHOD.

By William Brinsmaid.

Wishing to use the Roese-Gottlieb method for the determination of fat in evaporated milk as published in Circular No. 66 of the Bureau of Chemistry, it was found that the Röhrig tubes for this purpose could not be purchased. None of the dealers in chemical glassware of whom inquiries were made, knew anything of them. The writer had seen the tubes designed by Mr. Patrick, but wished a tube differing from them in some respects.

As there is nothing complicated about these tubes specifications were drawn up and the tubes ordered from the glass-blower. The specifications were determined by sealing the end of a glass tube of five-eighths of an inch inside diameter and ending the amounts of material required in exactly the same way as in an actual determination. After the mixture had settled for twenty minutes, marks were made on the tube in two places. The tube was first marked at the lowest point on the column of ether at which the ether could be safely drawn off. The second mark was made above the top of the ether column at a height that would allow space for proper mixing. The tube was then emptied and these two points were measured in cubic centimeters. They were found to be 19.5 and 85 cubic centimeters, respectively. The specifications were as follows:

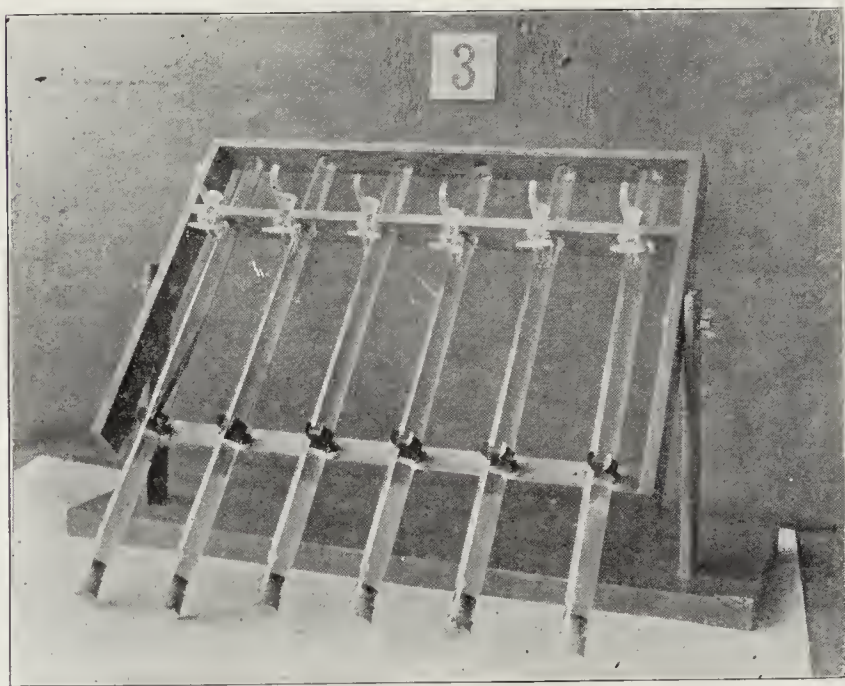
1. Inside diameter of tubing to be five-eighths of an inch.
2. Drainage tube to be so placed that the bottom of the orifice is at the 19.5 cc. point.
3. Capacity of the tube to should to be 85 cc.



4. Mouth of tube to be constructed to fit the taper of a cork stopper.

A rough drawing was sent with the specifications.

Figure 1 shows an empty tube and Figure 2 shows a tube with a fat determination in it. The height of the emul-

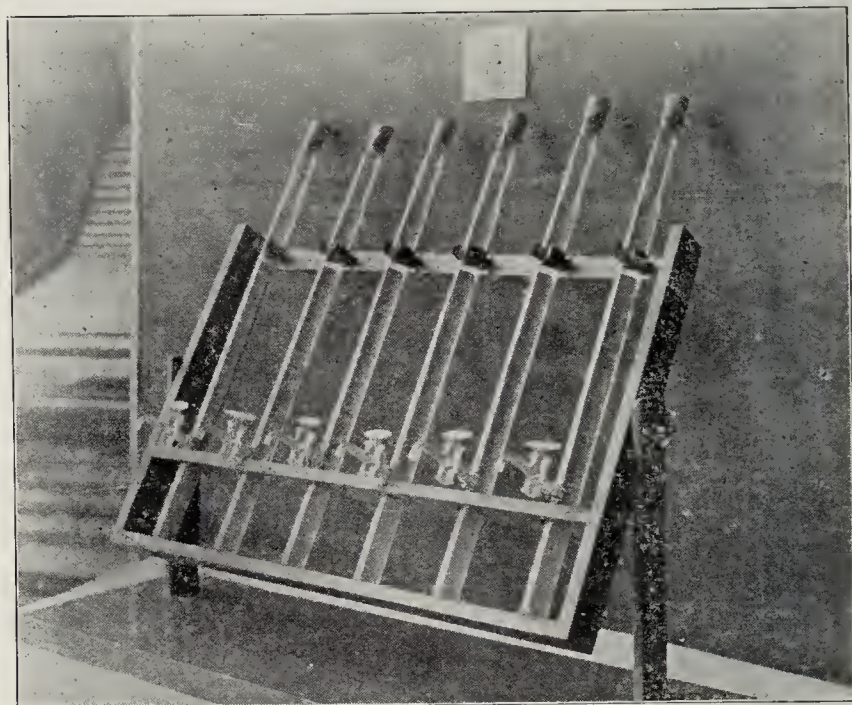


sion in the tube can easily be seen. With some milks the emulsion may stand a very little higher, but as yet there has been no difficulty with the tubes made as specified.

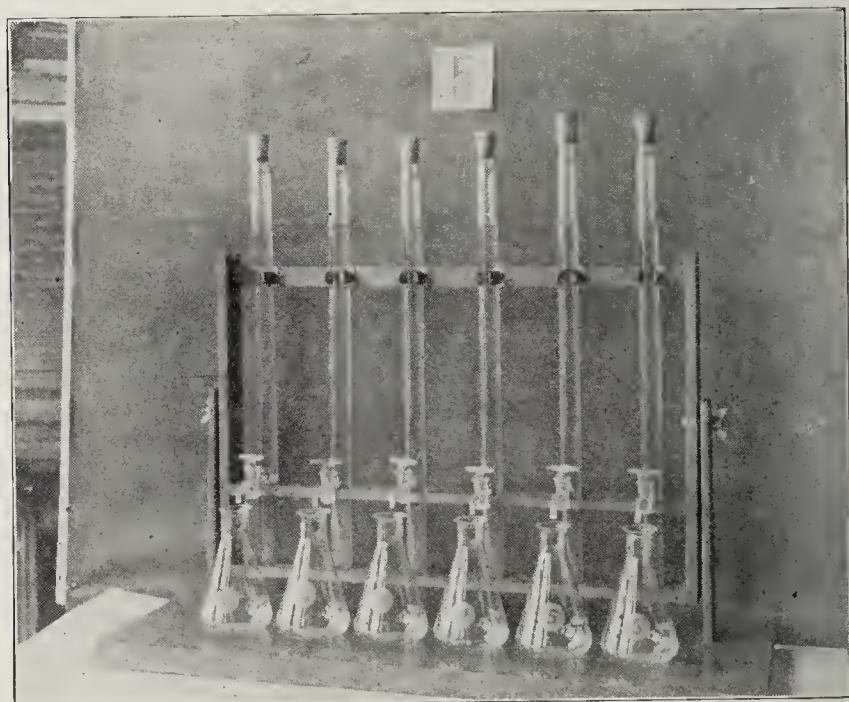
The tubes being awkward to handle and the drainage cock rather fragile, the problem of a safe and convenient mode of handling presented itself. At first the tubes were set in perforated blocks but when handled in this way the mixing has to be done singly and this is a rather slow method.

Finally a tilting rack was designed of the form shown in Figures 3, 4 and 5, and this has been found well adapted to the purpose.

Boiled cork stoppers are used in the tubes and if well fitted will hold the small pressure developed without trouble. The mixing of the milk with the ammonia and with the alcohol is done quickly while holding the tube in the hand and without using the stoppers. The tubes are then placed in the rack in an upright position and the ethyl ether added and



the cork stoppers placed firmly in the tubes. The tilting frame with tubes is then turned back as shown in Figure 3 and again turned to an upright position, and this continued as long as necessary. The petroleum ether is then added and the process repeated. The rack is then placed in the position shown in Figure 4, the wing-nut tightened to keep it at this angle and the contents of the tubes allowed to settle. This position prevents the emulsion from running into the outlet tube, which it is liable to do if the mixture is allowed to settle with the tube in an upright position.



In this way six determinations can be extracted in the time that would be required by one if held in the hand. Furthermore, as the tubes are not held in a warm hand, there is less pressure developed. After settling for a proper time the rack is turned to an upright position, the flasks placed under the outlet cocks as in Figure 5 and the mixed ethers and fat drained off. If closer drainage is desired the tubes

may be held in the hand while the last portion is drained off. Funnels and filter papers may be placed in the flasks if desired.

Dr. William Frear's paper, entitled "A Note on a Simple Apparatus for the Gravimetric Determination of Benzoic Acid," was read.

[Dr. Frear's paper will be printed in the August number of the AMERICAN FOOD JOURNAL.]

Mr. Small, representing the Pacific Coast Fishing Interests, extended an invitation to this Association to take a trip up the Puget Sound and see the actual packing of salmon, boat to leave Colman Dock at 9 A. M., Friday, the 12th, and returning at 10:30 P. M. of the same day.

Mr. Willard, Chairman of the Committee on Desired Changes in the Constitution, reported changes desired in the proposed constitution of the Association of State and National Dairy and Food Departments, as follows:

"Article 3—Officers. The officers shall consist of a President, a Vice-President, a Secretary, a Treasurer, an Executive Committee of five members, and the Chairmen and Secretaries of Sections.

"Article 5—Election of Officers. Section 1. All officers of the Association as a whole shall be elected from its voting members by written ballot. Officers of sections shall be elected by the respective sections.

"Section 3. The President shall not be eligible for re-election and any office is vacated when the occupant ceases to be a voting member of the Association or Section. The Executive Committee shall consist of the President and Secretary of the Association and Chairmen of the Sections.

"Article VII. Executive Committee. Duties. Section 1. The Executive Committee shall annually elect one of its members chairman, and the Secretary of the Association shall be Secretary of the Executive Committee.

"Section 2. The Executive Committee shall arrange the programs for the general meetings and shall fix the time and place of holding meetings of the Association unless otherwise directed by the Association. When the time and place is fixed the Secretary shall at once notify the Secretaries of the sections and shall also state the portions of the time to be occupied by the general meetings of the Association in their numerical order. When the Association is not in session, the Executive Committee shall act for the Association in such matters of business as may arise, or concerning which they may be instructed by the association.

"Article X. Membership. Section 2. All persons connected with the enforcement of state and Federal laws regulating the sale of drugs and of dairy and other food products are ex-officio eligible to membership in the sections and are entitled to all the privileges of the Association except voting and holding office.

"Article XII. Program. Section 1. The program of the annual meetings of the Association shall include an address by the President, reports of officers and committees and such addresses on matters of general interest as may be arranged by the executive committee, programs of sections as arranged by officers of the sections, proposed amendments of constitution and such other business as the Association directs. Opportunity shall be given for miscellaneous business at each session of the annual meeting.

"Article XIII. Sections. Section 2. Sections A and B are admitted as organized under their own constitution and by-laws. The other sections shall organize by the selection of chairman and secretary and such other officers and committees as each particular section shall deem necessary.

"Section 4. The chairman of sections shall, at least sixty days prior to the annual meeting, refer the programs of their respective sections to the executive committee."

Dr. Bryan presented the report of the committee appointed to prepare a draft of constitution and by-laws.

It was moved by Mr. Willard and seconded by Mr. Chittick that the report of the Committee on the Constitution and By-laws be first considered.

On motion of Dr. Barnard they were adopted as read.

Dr. Bryan moved the adoption of the report as read by the Committee on the Desired Changes to the Constitution.

Dr. Barnard moved to strike out "and Secretaries" in Article III, and the motion was carried.

Dr. Bryan moved to strike out the amendments to Section 4 of Article V. The motion was lost.

The committee's report, as amended, was adopted.

(Adjourned.)

THURSDAY, JULY 11.

2 P. M.

The Chairman: The section will please be in order. The first paper on the program will be one on the Interpretation of Vinegar Analyses, by W. H. Harrison of Illinois. Dr. Bryan will be good enough to read the paper for us.

Dr. Bryan: I will state that this paper is confined almost exclusively to discussions arising out of sugar vinegar.

INTERPRETATION OF VINEGAR ANALYSES.

By T. J. Bryan.

During the past year there have appeared in Illinois, three distinct types of so-called sugar vinegars, sold under various names, as Compound Sugar and Spirit Vinegar, Compound Sugar and Distilled Vinegar and Compound Molasses and Distilled Vinegar, and other similar names. These vinegars being of interest to Food Control Chemists, I present the data which we have collected, hoping that it may aid other chemists in passing upon them and also stimulate a discussion of the subject. Each of the samples analyzed under the above names, may be placed in one of the three types according to the following classification: (Indicates on blueprint.)

It will readily be seen from the above table that the three types are quite distinct, and that they are alike only in regard to their phosphoric acid content.

All three types of vinegar are made from molasses, the differences in composition being due, no doubt, to the methods of manufacture as well as the nature of the molasses used.

The first question which arose when we started the work on these "compound vinegars," was how do they differ from other vinegars and what are their constants?

By a study of the above table, it will be seen that the positive polarization, very low alkalinity of ash, absence of soluble phosphate and the very low insoluble phosphate, are the principal differences from other vinegars.

All the compound vinegars analyzed, ash easily in a faintly red muffle, giving a pure white ash. The large amount of insoluble carbonate there present, is always apparent on dissolving in nitric acid.

The solids, ash and nonsugar solids, can be controlled to fall within the limits of cider vinegar, and the percentage of ash in nonsugar solids may, possibly, be so controlled.

To determine how much molasses vinegar the so-called compounds contain, considerable time was spent in getting authentic samples of straight molasses vinegar. Three samples were secured which were made from "black strap." They show the following average composition:

Acid	5.04
Total Solids	8.61
Total Ash	2.10
Alkalinity of Ash.....	24 cc.
Soluble P ₂ O ₅	Trace
Insoluble P ₂ O ₅	49.7
Nonsugar solids	7.37
Ash in nonsugar solids.....	28.2
Specific gravity	1.038

The color is dark reddish brown (a dilution with water, 5 to 95, gives the color of a dark cider vinegar). The odor and taste recalls that of the "black strap" from which they were made.

It will be seen at a glance that only a small amount of such a vinegar can be used in the compounds as tabulated. In order that we may show the dilution with distilled vinegar necessary to make vinegars identical with types one and three, it will be necessary for us to consider the constants of distilled vinegar. The average of 36 samples of distilled vinegar as analyzed in this laboratory during the past year, gave results which are slightly higher than those generally given. They were as follows:

Total solids .....	.25
Ash .....	.07
Sugar	Trace
Nonsugar solids, approximated at..	.20

Attempts to make mixtures of the molasses vinegar and distilled vinegar which would show the probable composition of the so-called compounds results as follows:

Taking 4 per cent of the molasses vinegar and 96 per cent of distilled vinegar, we get a mixture of the following compositions:

Total ash	1.49
Nonsugar solids .....	.486

Which is exceedingly close to the average of Type 1 compound.

A mixture of 15 per cent molasses vinegar and 85 per cent distilled vinegar, would give:

Total ash .....	.368
Nonsugar solids	1.275

This agreement with Type 3 is almost perfect, except in the case of the alkalinity of ash. No figures for total solids would be of value in these comparisons, owing to the wide range of sugars present in the mixtures. Molasses vinegar carries sufficient insoluble P_2O_5 to yield phosphoric acid equivalent to that found in any of the dilutions.

Type 2 of compound vinegars cannot be classed with either Types 1 or 3, being distinctly different. No combination of "black strap" vinegar and distilled vinegar will give mixtures identical with it. The high polarization, low ash and nonsugar solids are its striking characteristics. It is hoped that the analysis of the beet sugar molasses which we recently secured, will throw some light on the vinegars of this type.

We have held that the addition of 4 per cent, or even 15 per cent, of molasses vinegar to a distilled vinegar, is made solely for the purpose of coloring it, and it makes no difference whether the compounding is done before the vinegar stock enters the generators or after it leaves them.

Many manufacturers object to the statement, that they are colored distilled vinegars, because no so-called color has been added. The following letter explains one view on the subject:

"We take our final molasses and ferment it to the alcoholic stage. This is then put into a still and boiled sufficiently to vaporize the water and alcohol. Nothing comes out of the still except chemically pure 25 per cent alcohol. All the impurities that were in the molasses remain in the still; they are dumped out and used for other purposes. The 25 per cent chemically pure alcohol which we obtain is next put through the vinegar generators, and in passing through them, undergoes the acetic fermentation; that is, it comes from the generators a chemically pure vinegar. Such vinegar is as clear as water, and we sell it as pure distilled vinegar.

"To produce the colored vinegar, we do not use any coloring matter; we simply compound this distilled vinegar with a certain amount of pure fermented vinegar, and it gives us a colored vinegar without coloring matter but chemically pure.

"I have submitted our vinegar, and the process of manufacture, to the National Pure Food Commissioner at Washington, and have a written statement from them that it conformed with the National Pure Food Law in all particulars."

The sample of vinegar referred to in the above letter, falls in the class of Type 1 compounds, and one of its constants show it to contain more than 5 per cent molasses vinegar.

None of the compound vinegars analyzed could be mistaken for cider vinegar upon complete analysis but there are many of them which agree in solids, ash and acid, with them and might be passed upon as cider vinegar by an analysis which included only the determination of acid, solids and ash. Several samples of these compound vinegars have been purchased for cider vinegar in retail stores in this state. One sample was found in the original bottle and labeled "Pure Apple Cider Vinegar." We have also found several samples of cider vinegar, which we feel sure contain more or less of these mixtures of molasses vinegar and distilled vinegar, and there is no doubt but that molasses vinegar will be largely used as an adulterant.

(The reading of this paper was followed by an informal discussion.)

The Chairman: We will now pass to the subject of formic acid in food products by Mr. Shannon of Michigan. Mr. Shannon is not present, but he has submitted his communication which I will ask Dr. Loomis to read. Dr. Loomis.

FORMIC ACID IN FOOD PRODUCTS.

By F. L. Shannon.

It was quite by accident that during an investigation into the character of the fruit products offered for sale at the soda fountains, ice cream parlors, etc., throughout the state of Michigan, the author came upon a sample of fruit syrup that was claimed to contain no preservative, but which would outlast all others in keeping qualities. From previous experience with soda fountain products such a condition could only point to one of two things; either the acme of perfection had been reached in the manufacture and handling of fruit

products or the product contained something which exerted a prohibitive tendency to fermentative changes, the growth of molds, etc. The first condition could readily be dispensed with, as we all know that it is an impossibility to prepare a fruit syrup or crushed fruit that will keep any length of time, when exposed at room temperature in an open dish, unless we add some chemical preservative. This product, however, when allowed to stand for weeks, in an open dish alongside a home-made product, would not spoil, while the home-made sample would spoil in a few days. Again when part of the market sample was mixed with the home-made sample, the keeping qualities of the latter were remarkably prolonged. It was therefore quite evident that something had been added to prevent it from changing. An analysis proved that it did not contain any of the nine common preservatives or any of the artificial sweeteners, viz., benzoic acid, salicylic acid, boric acid, sulphurous acid, hydrofluoric acid, fluoboric acid, naphthol sulphonic acid, formaldehyde, saccharin or dulcin. So then the preservative was not one of the ordinary substances used in such products.

One of the chief characteristics of the fruit product was the marked tart or sour taste, when compared to other fruit syrups. This, coupled with the fact that most all preservatives are acid in character lead me to believe that the substance used was no doubt an acid or acid in nature. The determination of the total acidity confirmed in a measure this assumption, as Table II will show.

Most acids used for the purpose are of a volatile nature and are readily removed by steam distillation. Accordingly when this sample was subjected to steam distillation the distillate reacted strongly acid. This then showed two things: first, that the unknown substance was probably an acid, and, secondly, that the acid was volatile.

Of the volatile acids that possess preservative powers and one which has been discussed more or less in the past year, is formic acid, consequently my attention was at once directed to it.

A resume of the literature on formic acid revealed the fact that it has been used for sometime in Germany and England for the preservation of fruit juices, fruit syrups, etc., but it appears not to have received much attention from manufacturers of fruit products in this country.

It has been the general belief among chemists, however, that some preservative other than the ones found, were being used in these products and investigations have been made in various laboratories throughout the country for the purpose of determining the identity of the substance used. Smith, in 1907, found formic acid in a sample of French cherries, but this seems to be the only time formic acid has been found in food products in the United States as a preservative. A number have suspected its use in fruit products and have built up their investigations with that substance in mind, but because of the unsatisfactory and indirect methods of identification and further owing to the fact that many substances respond to these indirect methods, it has been difficult to reach a positive conclusion.

It was found that the methods for the detection of formic acid did not depend upon its isolation and subsequent identification, but rather upon the indirect method of its reducing power, principally upon silver nitrate and mercuric chloride. Experiments, however, proved that this could not be taken as positive evidence, as it was found that a number of substances would give a distillate that would reduce both silver nitrate and mercuric chloride. Phosphoric acid, simple syrup, fruit syrups, etc., which were known not to contain any formic acid, when steam distilled, were all found to give a distillate that would reduce these two solutions.

The most satisfactory method found for the positive identification of added formic acid in fruit products was the distillation method and the subsequent identification of the formic acid, first, by reducing it to formaldehyde with pure magnesium ribbon and sulphuric acid, and the identification of the formaldehyde and secondly by making the insoluble lead salt and its identification both chemically and crystallographically. The details of both these methods will be found in an article published in the July number of the *Journal of Industrial and Engineering Chemistry* under the heading, "The Detection of Formic Acid in Fruit Products." But in order that we may have the benefit of any suggestions or criticisms that any member of this honorable body may offer, I shall go over these methods as published:

"To about 200-500 cc. of the syrup or crushed fruit in a 2-litre, long-necked, round bottom flask provided with a Reitmeier bulb, add about 50-100 cc. of water. Subject to steam distillation, collecting the distillate (usually about 2,500 cc.) until it ceases to give an acid reaction with litmus. Neu-

tralize with N/1 Na OH, using litmus as an indicator. Evaporate on a steam bath to about 50 cc., transferring from the large evaporating dish to smaller ones as the volume decreases. Transfer to an Erlenmeyer flask provided with a glass tube about three feet long as an air condenser, add a few pieces of pure magnesium ribbon or wire and a slight excess of dilute sulphuric acid, set in a cool place for an hour, adding diluted sulphuric acid through the tube from time to time as the reaction ceases. Transfer to a suitable distilling flask and collect the first 10 cc. of the distillate, which will contain most of the formaldehyde if the original syrup contained formic acid."

There are a number of methods used for the detection of formaldehyde and nearly every analyst has his favorite test. However, the methods which proved the most satisfactory in this work were Leach's method, Phloroglucol method, Rimini's method, and the Rescorcin method of the United States Pharmacopœia. A positive reaction with these four tests was considered conclusive evidence of the presence of formaldehyde.

CRYSTALLOGRAPHIC IDENTIFICATION.

Inasmuch as practically all methods for the detection of formic acid previously reported are indirect methods depending upon the decomposition of formic acid or upon its reducing powers, it seemed desirable to attempt the isolation of formic acid in the form of an insoluble salt.

The usual procedure in determining the identity of an organic acid in plants, is to prepare some readily crystallizable salt, sparingly soluble in water. Of the various formates the lead salt crystallizes readily without water of crystallization, is very stable and requires 63 parts of water for solution. The formation and identification of lead formate would then constitute a direct and positive proof of the presence of formic acid. After numerous attempts the following procedure was adopted:

Steam distill about 1,000-1,200 cc. of the syrup as in the first operation, collecting the distillate (2,500-3,000 cc.) in a receiving flask to which about 5 cc. of lead hydrate cream has been added. Shake the flask occasionally and as the lead hydrate is dissolved add a few cc. more, until all the formic acid is combined. Concentrate the liquid in a large dish and set aside in a dessicator. If formic acid was present in the original material, needle-like crystals of lead formate will form. Wash the crystals with absolute alcohol, to remove any lead acetate which may be present, spread on a filter paper and dry. To the dry crystals apply the following tests:

- Aqueous solution will reduce AgNO_3 upon warming.
- Aqueous solution will reduce HgCl_2 solution upon warming.
- Aqueous solution will reduce platinum chloride upon warming.
- To a portion of the crystals in a dry test tube add sulphuric acid and warm. Carbon monoxide is generated which will burn in the tube with a blue flame when ignited.
- Transfer some of the crystals to a small distilling flask, treat with conc. phosphoric acid and distill.

The distillate which is formic acid will react as follows:

- Acid to litmus and acid to taste.
- Reduces silver nitrate on warming.
- Reduces mercuric chloride on warming.
- Reduces platinum chloride on warming.
- Is reduced to formaldehyde by magnesium wire and sulphuric acid.

As previously mentioned it was found that when phosphoric acid and water alone were distilled the distillate would reduce silver nitrate and mercuric chloride solutions. Therefore before test (e) was carried out the phosphoric acid was subjected to distillation until it no longer gave a distillate that would reduce silver nitrate and mercuric chloride solutions. The crystals of the lead compound were then added and the distillation continued.

Although the chemical evidence that the volatile acid obtained from the fruit products used in this investigation is conclusive, it was thought desirable to submit the crystals to Dr. Edward H. Kraus, Professor of Geology and Mineralogy, University of Michigan, and he concludes as follows:

"The crystallographic-optical properties, together with the fact that a distinct reaction for lead is easily obtained upon the plaster tablet with the blowpipe, indicate conclusively that the substance examined is lead formate."

To further substantiate the proof a number of fruit syrups that were known to contain no added formic acid were subjected to steam distillation and an attempt made to separate a lead compound. In some instances a few crystals were ob-

tained but at no time would the crystals give the characteristic test for lead formate.

QUANTITATIVE DETERMINATION.

After conclusively proving the presence of added formic acid in fruit products obviously the next step was to determine, if possible, the amount used.

A review of the literature shows that the methods generally used for this determination depend upon the following reactions:

- The reduction of mercuric chloride to mercurous chloride, the excess of the mercuric chloride solution being titrated back with potassium iodide solution (Auerbacher and Pluddeman)¹, or by weighing the insoluble mercurous chloride (Franzen and Egger)², (Finke)³.
- The action of conc. sulphuric acid measuring the evolved CO . (Wegner)⁴.
- The reduction of KMnO_4 in alkaline solution (Klein)⁵.
- The reduction of platonic chloride solution and the subsequent weighing of the metallic platinum (Bacon)⁶.

The platinum chloride method being one of the latest methods proposed and one that seemed to present the least chance for sources of error, was the first one employed. However, after a number of determinations were made, the results of which were not at all satisfactory, this method was abandoned. The greatest difficulty that the author experienced with this method was in obtaining a reduction of the platinum chloride to take place at all times. Occasionally the reduction would go on readily and would be complete in one hour, while again it was often found necessary to boil the solution containing the formic acid with the platinum chloride for 5-6 hours before any reduction was noticed. Further it seemed impossible to get many results to check concordantly.

The reduction of mercuric chloride solution seems to have been given the greatest amount of attention of all the remaining methods and a great amount of work has been done in its perfection, although at the present time, owing to the fact that there are many things which reduce mercuric chloride in acid solution it is not an absolute quantitative method. Experiments with it show, however, that very close results can be obtained. The method used in the experiments reported here is practically that of Franzen and Eggar, and was carried out as follows:

Preparation of Modified Mercuric Chloride Solution:

HgCl_2	200 grammes.
$\text{NaC}_2\text{H}_3\text{O}_2$	300 grammes.
NaCl	80 grammes.

Dissolve in 1,000 cc. of water. Let stand forty-eight hours and decant supernatant liquid.

To a weighed portion of the sample (50-60 gms.) in a two litre round bottom flask, add distilled water until the volume of the whole is about 100 cc., subject to steam distillation, collecting the distillate until it ceases to react acid. (Usually about 1,500-2,000 cc.) Some precaution must be taken to keep the material in the distilling flask from caramelizing and the volume must not be allowed to increase. Exactly neutralize the distillate with N/L NaOH using litmus as an indicator, evaporate to 50-60 cc. on a water or steam bath, keeping the reaction constantly alkaline throughout the entire evaporation. Filter the solution into an Erlenmeyer flask and add dilute hydrochloric acid until slightly acid. For every .5 gms. of formic acid present per litre of distillate, add 50 cc. of the modified mercuric chloride solution. Attach to a reflux condenser and heat the flask in a bath for 3 or 4 hours in which the entire flask is surrounded with steam. Collect the mercurous chloride, dry and weigh.

This method was carried out on a number of fruit syrups, the results of which are given below:

PRELIMINARY WORK—TABLE I.

Sample No.	Kind of syrup.	Formic Acid added.	Formic Acid found by HgCl_2 method.
1	Blank (water).....	0.34917	0.34828
2	Simple syrup.....	0.0000	0.0093
3	Simple syrup.....	0.1087	0.1085
4	Simple syrup.....	0.1070	0.1062
5	Simple syrup.....	0.2204	0.2020
6	Pineapple syrup, containing 0.1% Na Benzoate.....	0.2246	0.268
7	Strawberry syrup, containing 0.1% Na Benzoate.....	0.2314	0.2508

¹Zeit. Nahr. Genussm. 17, 425.

²Journ. Praktische Chemie. 83, 323.

³Zeit. Nahr. Genussm. 31, 1, and 22, 88-114.

⁴Zeit. Analyt. Chemie. 32, 427.

⁵Analyst—1906, 31, 410.

⁶Circ. 74, U. S. Dept. Agric., Bureau of Chemistry.

TABLE II.

Sample No.	Kind of Syrup.	Total Acidity expressed as H_2SO_4	Formic Acid found by $HgCl_2$ method.
8.	Pineapple	0.555	0.219
9.	Pineapple	0.562	0.251
10.	Pineapple	0.552	0.267
11.	Pineapple	0.529	0.283
12.	Strawberry	0.505	0.172
13.	Strawberry	0.525	0.173
14.	Strawberry	0.499	0.176
15.	Claret	0.357	0.008
16.	Pineapple	0.355	0.005
17.	Strawberry	0.355	0.014
18.	Strawberry	0.274	0.020
19.	Pineapple	0.270	0.011
20.	Pineapple	0.250	0.004
21.	Pineapple	0.209	0.004
22.	Pineapple	0.195	0.007
23.	Pineapple	0.174	0.004
24.	Strawberry	0.186	0.008
25.	Imitation banana	0.016	0.005

The statement previously made, viz., that the mercuric chloride method is not absolutely accurate when carried out in the manner described above now becomes evident. As it will be noted that simple syrup alone gives a distillate capable of reducing mercuric chloride. However, samples Nos. 8, 9, 10, 11, 12, 13 and 14 gave an abundant amount of formaldehyde and lead formate and can be reported as positively containing added formic acid in considerable amount.

It would seem then that the formation of formaldehyde, coupled with the formation of lead formate and their subsequent identification would furnish a conclusive and positive proof of the presence of formic acid, and that the mercuric method is the most reliable method for determining the amount used.

The author is indebted to Mr. A. R. Todd of this laboratory for assistance in the work herein reported, and also to Dr. Edward H. Kraus, of the University of Michigan, for his co-operation.

Mr. Barnard, of Indiana: About the time that Mr. Shannon published the results of his early findings on Formic Acid in Foodstuffs, our department was conducting similar investigations with similar results, and, as an outgrowth of our investigations, some six months ago we filed a case in the local lower court against the representative of a firm in the east manufacturing goods preserved in formic acid. The defendant pleaded not guilty, but was convicted, and has filed an appeal, and the case is now pending in the Circuit Court of the State. I am advised by the attorney for the defendant that the firm selling the goods is prepared to make a vigorous defense, provided that the investigations they have undertaken develop the fact that formic acid is not injurious to health. Evidently we are going to have an opportunity in Indiana again to try one of these mooted questions, and I would ask that the members of this section co-operate with me in collecting such data as may bear upon the point in question. If formic acid is a good and reasonable food preservative, there is no reason why it should not be used, but if it is not a satisfactory and efficient food preservative, or is at all injurious to health, it obviously should not be used. Now, Americans, unfortunately, are away behind the times in their study of formic acid. We do not know very much about it, and there is very little that has appeared on the subject. What we have appears from Germany, and so, let us, as American food chemists, collect a little data on this very important subject, and I would ask you to send me such information as you may have from time to time, because we want to try these goods out on their merits, and we want the results, when obtained, to express not only the last word as far as the courts are concerned, but to express the last word as far as the protection of the people's food supply is concerned.

Mr. Hansen of Utah: Has the use of formic acid become a common practice in certain lines?

Mr. Barnard of Indiana: I am advised that it has been used in Germany for some eighteen or twenty years. In this country we have found it only in fruit products. It does not seem to be a suitable preservative for anything other than acid fruit products. We find it there in considerable quantities.

Mr. Chittick of Iowa: May I ask what per cent of formic acid is used in these preservatives?

Mr. Barnard of Indiana: I have the word of the manufacturers that they use a little less than one-tenth of one

per cent, but as a matter of fact we have been able to isolate four times that quantity. In ascertaining the presence of formic acid we have used the method employed by Mr. Shannon. That seems to be very well adapted for this purpose.

I might say to the chemists also that I have been doing other work along this line for the Association of Official Agricultural Chemists, and we hope to report on the production and estimation of formic acid this fall.

The Chairman: We have one paper submitted by Dr. LaWall, one of the chemists in Pennsylvania. It is very brief, and it was not received in time for inclusion in the printed program, and, unless there be objection, I will ask that the Secretary read the paper and give in a few words the gist of it.

THE DANGER OF AN UNINTELLIGENT USE OF THE HEHNER TEST FOR FORMALDEHYDE.

By C. H. LaWall.

Upon several occasions the author of this brief note has pointed out errors which have arisen in testing for and reporting the presence of formaldehyde by the Hehner test when other aldehydes are present. In 1905, Proceedings of the Pennsylvania Pharmaceutical Association, an instance was recorded where vanilla ice cream was reported to contain formaldehyde, when, as a matter of fact, the vanillin, which is methyl-protocatechuic aldehyde, was the cause of the reaction, and in 1909 *American Journal of Pharmacy*, page 394, the reported observation that boiling can sugar solutions contain formaldehyde was shown to be an error and that furfuraldehyde was the reacting substance in this instance.

The most recent case of this kind has recently come under the observation of the author, in which a milk inspector familiar with the Hehner test and in the interpretation of results, so far as milk is concerned, reported the presence of formaldehyde in some cake (indicating the presence of preserved egg mixture). Upon obtaining some of the cake and suspecting that the reaction was due to the vanillin present in the flavoring, a few experiments clearly showed no formaldehyde was indicated by the Rimini test, either in the aqueous infusion of the material direct or in the distillate from the same, although the Hehner test was strongly positive in the former case and very feeble in the latter, presumably because the vanillin does not come over in the distillate except as mere traces.

These experiments clearly show the necessity for an intelligent use of any tests upon which a prosecution is based, as great injustice might be done to an innocent person through a misinterpretation of a test by one who either does not know or does not think of the chemical principles underlying the test.

The Chairman: The Chair notes that the time has arrived which was set for the election of officers. The election of officers is now in order. The Constitution adopted yesterday provides for the election of three officers who shall serve this Association as president, vice president and secretary, respectively, and an executive committee. Now, the secretary suggests this question. In view of the fact that this Association was organized as a separate association and is recognized in its present status as a separate association, and in view, further, of the fact that the American Association of Food, Dairy and Drug Officials in adopting a constitution has acted so that this Association may be taken into that body, as it stands, as a section of that body, the question is raised whether it would not be appropriate for us under these conditions to take formal action ourselves so as to become the other part to the agreement. What is your pleasure? Shall we proceed to the election of officers first or shall we proceed to the question as I have suggested?

Mr. Bryan of Illinois: I move, Mr. Chairman, that this Association signify its desire to affiliate with the American Food and Drug Control Officials as Section B.

The Chairman: You have heard the motion. Is it seconded? The motion was duly seconded.

The Chairman: The motion is before you, gentlemen. Any remarks? If not, all in favor say "Aye;" opposed "No." The motion is adopted. The election of officers is now the order of the day.

Mr. Chittick of Iowa: Does the constitution adopted the other day make any provision as to the election of officers how they should be elected?

The Chairman: It simply says that we have three officers to elect; a President, a Vice-President and a Secretary. but it does not state how.

Mr. Willard of Kansas: I move that we proceed to the election of officers by ballot and that there be but just one ballot; that is, the election of the three officers on one ballot.

Mr. Bryan of Illinois: I second the motion.

The Chairman: The motion is before you. Any remarks? If not, all in favor signify by saying "Aye"; contrary, "No." The motion is carried. Now, will we nominate by a raising of hands, or shall we proceed by written nomination? If there is no objection, we will proceed by writing the names and I will ask Mr. Harms to act as teller and also Dr. Johnson, if he will be good enough.

Mr. Bryan of Illinois: I would suggest, Mr. Chairman, that it is only necessary to write the names in order, President, Vice-President and Secretary, and we will understand that they come in that order and it will save us some writing.

The Chairman: The suggestion is a good one and will be adopted.

(Vote is taken.)

Mr. Harms of Utah: I have to report to the chair that the candidates receiving the greatest number of votes are, for President, Freer, 9; for Vice-President, Chittick, 4; and for Secretary, Bryan, 8.

Mr. Chittick of Iowa: The Vice-President has not received a majority and I move that there be another election for the office of Vice-President.

The Chairman: Gentlemen, the tellers have announced the result of the ballot, and another ballot for Vice-President will be in order.

Mr. Loomis of Washington: I move that we make Mr. Chittick Vice-President by unanimous consent.

Mr. Mahr of Oklahoma: I second the motion.

The Chairman: You have heard the motion, which has been duly seconded. All in favor of the adoption of this motion will signify by saying "Aye"; opposed, "No." The motion is adopted. As President-elect I desire to thank you for your mark of regard. We will now proceed.

Mr. Harms of Utah: As teller I have to report that the ballot is cast for Mr. Chittick as Vice-President unanimously.

The Chairman: Mr. Chittick is declared elected as Vice-President.

Before we take up the remainder of the program I am requested by the President of the Association to call your attention specifically to the fact that when the session this afternoon is concluded, it will be the last session in this building, and that we will meet tonight at 8 o'clock in the rooms of the Commercial Club, where the meeting was held last night for the conclusion of the business of the main association.

The next in order is a round table on laboratory records for the official food laboratory, which the chair has requested Dr. Redfern of Nebraska to open.

Mr. Redfern of Nebraska: It seems to me that this matter of laboratory records is largely a personal one. Of course we have at all times got to have our record good to go into court with, and I presume that all of us have a separate way of keeping a record, but I, for one, feel that I have got something to learn on keeping records, and probably the best I can do is to give you my system of keeping laboratory records.

It was quite a problem to me at first just how to arrange my records, but I have finally come to a system whereby I keep a separate record book for all original records. I have one section for miscellaneous analyses, and I have one for vinegars, and one for ice cream and one for milk and cream.

Now, in doing analytical work, I always like to put down in my original record book all of my calculations, figures and everything, my titration, the methods of alkalinity and so on, and I find very often that I want to go back and refer to those records, and, especially when I go into court I want to take them up again, and see if I am absolutely right, because I never have had any desire to swear away any man's liberty and I want to be sure that I am right before I go into court.

A person can also keep a supplemental record in the form of a card system. I have not tried that, but I have found that it would be a ready record to get a summation of results on particular brands of foods, cataloged either under the product itself or under the firm name, and no doubt it will be a good reference.

Where you have got several hundred records in the book, in the miscellaneous section, you have got to search a long while to find out the article you want, while in the card system you can find it in just a minute's time.

I would like to hear what the rest are doing with the records. That is my method, but I do not claim it to be ideal by any means.

The Chairman: Are there any questions? I would like to ask Mr. Redfern what sort of record he keeps for the purpose of identifying the sample. The records you have described are those related to the data of analysis.

Mr. Redfern of Nebraska: Yes. You mean connecting the analysis with the sample?

The Chairman: Yes.

Mr. Redfern: Well, I give each sample a number in the laboratory.

The Chairman: When you buy a sample you have to connect it up with the purchasing agent, don't you?

Mr. Redfern: I am referring to samples largely collected by inspectors. We have seals, very similar to the Government seals, and they are put on each sample sent in, in triplicate, and the number is put right on the seal.

Mr. Chittick of Iowa: I would like to ask Mr. Redfern a question. Do you maintain the same number on your laboratory sample as the inspector places on it?

Mr. Redfern: I do. Some do not do that, but we practice that in Nebraska.

Mr. Bryan of Illinois: I would suggest that what we need most along this line, in my opinion, is that each of the states represented here should, at a meeting, bring together copies—a sufficient number of copies so that they can be distributed to all the other states—showing all the permanent records that we keep with the exception of the note book, which, I think, we all keep more or less uniformly, and in that way we can find out how permanent records can be made to best advantage. It was my intention to bring with me copies of the different forms in use in our office, but I have forgotten to do so, but I think that should be made a special order of business for next year, and that every member should bring with him to the next convention copies of all the blanks used for making permanent records in his laboratory.

Mr. Mahr of Oklahoma: This is a most important factor. Now, anybody who has done any court work at all, knows that for matters of record identification is absolutely essential and that most cases are lost because you cannot trace properly the sample taken to the laboratory and analyzed with the one seized, and that is especially so in cases of alcoholic materials and materials of a criminal nature.

The Chairman: The next subject on the program is "Analysis of Catsups," by Dr. Cook, but I see that Dr. Cook is not in the room just now, so I will call upon Dr. Barnard to read his paper on "Compound Mustards."

PREPARED MUSTARD.

By H. E. Barnard and H. E. Bishop.

The authors have recently had occasion to examine a number of samples of prepared mustard. The data first obtained seemed inadequate to determine whether or not the samples were legal or adulterated and rather complete analysis of samples of compound mustards purchased on the open market has therefore been undertaken. The factors determined were the total solids, ash, sodium chloride, acidity as acetic, starch, crude fiber, protein, ether extract and the presence and identification of colors and preservatives.

An abstract of the work then finished was presented at the mid-winter meeting of the American Chemical Society. The analyses of the samples at hand has since then been completed and the final results are here given.

The so-called Government standard for prepared mustards is as follows: "Prepared Mustard, German Mustard, French Mustard, Mustard paste is a paste composed of a mixture of ground mustard seed or mustard flour with salt, spices and vinegar, and, calculated free from water, fat and salt, contains not more than 24 per cent of carbohydrates calculated as starch, determined according to the official methods, not more than 12 per cent of crude fiber nor less than 35 per cent protein, derived solely from the materials names."

Like all standards, those for prepared mustard represent the average composition of samples supposed to be genuine or approximating the best ideals of the manufacturers and the fact that the courts have very generally accepted the limits laid down by these standards as correct has given them much legal weight, even in states where they have not been enacted bodily into the statutes. Where such statutes have been enacted there seems to be no greater reason for questioning their validity or the chemical limits imposed than there is for questioning any other legislation which is of a regulative character.

It is always interesting and occasionally profitable to compile statistics, especially if the ground has not hitherto been thoroughly covered, and the authors in their efforts have

endeavored to collect new data which may be of value in showing the character of mustards which under present standard are either genuine or adulterated. At the Geneva Congress¹ it was held that only the seeds of *Brassica Nigra*, *B. juncea* and *Sinapis alba* should be used in the manufacture of mustard. An association of manufacturers² agreed in 1907 that Dijon mustard should be prepared solely from the seeds of *Brassica Nigra*. Dijon mustard is prepared by mixing the crushed seeds with aromatic and salted vinegar and acetic acid. Prior to 1905 such mustard frequently contained starch, but its use is now rare. Food Inspection Decision No. 137³ held that a condiment prepared from mustard or mustard flour and charlock with salt, spices and vinegar is not prepared mustard, and required that if charlock were used the preparation should be called "Prepared Mustard and Charlock."

It is significant of the divergent ideas of analysts and manufacturers to observe that the standard for prepared mustard allows the presence of not more than 24 per cent of carbohydrates calculated as starch, although the food inspection decision and the standards adopted at the Geneva Congress and by the manufacturers above quoted do not allow starch save only as it may be present in small quantities due to unripe seeds. The genuine seeds of *Brassica Nigra* seldom contain more than .3 per cent of starch.

The late chief analyst of Canada, MacFarlane, in 1890 examined ninety-five samples of commercial mustards. Following the custom of his predecessor, he holds that for medicinal purposes but 22 per cent of fixed oil is required, thus allowing the admixture of about 30 per cent of inert material; that is, farinaceous or starchy matter.⁴ MacFarlane refers to a regulation of the New Jersey State Board of Health allowing 25 per cent of starch in compound mustards and to a similar limit established in England by a judicial decision. In speaking of compound mustards he says, "Some people assert that since there is abundant evidence to show that mustard as sold in Canadian markets is largely subject to adulteration, it is just as well that this state of affairs should continue to exist and that so long as the mustard contains nothing injurious and is marked or sold as compound the public has not much to complain of." He, however, says that some limit should be set to the amount of diluting substances added, and to that extent at least he is, I think, in line with the food chemists of this country. In 1897⁵ Chief Analyst Macfarlane in Bulletin 50 submits the results of the analyses of sixty-six samples of commercial mustard and repeats his recommendations as to the amount of fixed oil required both in pure mustards and in compounds.

It is to be remembered that all of Macfarlane's work dealt with dry mustards and not with the prepared mustards with which this paper is concerned. From the little information at hand concerning the composition of compound mustards as understood in France, in Canada and in this country we are led to the conclusion that there is no international standard observed either by manufacturers or analysts. Certainly the so-called French mustards sold in this country would not be legal in France nor would some of the compound mustards passed as legal under our standard comply with the regulations of the Internal Revenue Department of Canada.

In all thirty-two mustards were analyzed. All of these mustards were so-called prepared mustards consisting of starch and salt ground up in vinegar and with or without turmeric as an added spice and coloring. Fifteen samples met the requirements of our standard as to minimum of carbohydrates and crude fiber present and the maximum of protein. Seventeen samples were illegal in ten cases because of an excess of carbohydrates, in two cases because of an excess of crude fiber and in four cases because the protein content was low. In four cases the goods were deficient in more than one factor.

The figures from which these results were derived were calculated free from water, fat and salt. This method of calculation takes no account of the great dilutions with water or acetic acid, and we have, therefore, no real basis upon which to calculate the actual value of the material save by computing results on a water free basis. It goes without saying that a compound mustard containing less than 13 per cent or total solids including salt and crude fiber is far less valuable than a mustard containing 20 per cent or over of total solids, and yet under the standards imposed the dilute mustard compound is as legal as the more concentrated prod-

uct. This fact prompts the query, "Should not standards which refer data to the dry, or other calculated basis, limit the extent to which dilution may be carried?"

Should not prepared mustard, for instance, admitting the validity of the modern method of preparation by adding starch, at the same time exact some definite amount of dry substance and so prevent the possibility of subjecting the good to infinite dilution?

Under the present standard the water content can be increased to any limit desired by the manufacturer, the only restriction imposed being that the goods be a "paste." If the standard now in use were amended by inserting the phrase "and not less than 15 per cent of solid matter, exclusive of salt," we should have a product of at least some definiteness of composition.

The Chairman: Is there any discussion upon this paper? Mr. Barnard's remarks emphasize the difficulty of keeping every point in mind when you are in so complex a work. If there is no discussion upon this paper we will ask Dr. Barnard to read his paper on "New Data on the Composition of the Oyster," which he has written, together with Emma Crandal and Charles Coffin.

Mr. Barnard of Indiana: This oyster is a curious animal. We have been working with him for some years and don't know as much about him as when we started out. The more we work with him the less we know about him, and we have only collected remnants of data, although I have had several chemists working upon the oyster practically constantly since last summer, and I have tried for several days on the way out here to get something out of the results, and the only thing that we have at hand is a lot of information which shows you cannot tell anything about the beasts, and I do not think it is worth while taking up the paper and reading it.

(Whereupon an informal discussion concerning the oyster took place.)

The Chairman: I will now ask Dr. Cook of South Dakota to present his paper on "The Analysis of Catsups."

Mr. Cook of South Dakota: Mr. Chairman, I was in hopes of being let off, for, in the first place, I have not prepared a paper on the subject and I don't know that I can say much, and then I have something of a headache.

I may say that we have three people, or have had three people in the last year—only two of them are left, however—who have made a number of analyses; in fact, we had analyzed, I guess, about every kind of catsup there is on the market in our state, every kind that we could get hold of. We went to work on the proposition when the United States Department of Agriculture issued a bulletin, No. 58 or 68, I forget which it is now, but I think it is 58, defining the method of analysis of catsup. I believe you are all familiar with that bulletin. We made some study at first of the situation in our state, and we thought the best thing to do would be to get on a train and go down to Indiana, Mr. Barnard's state, and come in contact with the process in the factory, and also to come in contact with as many men who have experience in analyzing catsup as possible. I went with the man who is now chief analyst, and we visited various plants. By the way, some of these plants declared that they were not making catsup from rotten tomatoes, and that their product was absolutely free from anything of the kind. We did find two factories making good clean catsup, as good as could be made, I think, and in the case of three others, they were not doing so. What I am saying now is simply preliminary to our findings. I make this as a sort of apology because I am not launching out directly in the analysis of catsup. In fact, I won't go into it deeply.

I went down to the manager in one establishment and he took us down to a sort of cyclone affair that was whirling around—a sorting belt—as wide as this and about as long from here to the window, and the tomatoes were being dumped in there of about a depth like that (indicating), I guess, and there were three people on the sorting belt, and I looked at the sorting belt and it looked to me as though they were not getting all the rots out. The manager, however, stated that it took all the rots out, and to prove it he asked us to go to the other end, saying that we would find everything all right, and we went around there and I reached down and found lots of rots, but I presume he must have thought everything was all right, for he said, "Well, it comes out at the other end all right anyway." Their analyst was along, and it seemed to us that he has not paid considerable attention to the matter of catsup, but was wasting his time on bacteria and absolutely ignoring the most essential part,

¹Ann. des Falsif., 1909, 2, 215-220.

²Ibid.

³U. S. F. I. D. No. 137.

⁴Bull. 19, Lab. I. R. D., Canada.

⁵Bull. 50, Lab. I. R. D., Canada.

at least what seemed to us the most essential part, and it was our opinion that he didn't know what he was about.

In another factory we found that they were dumping tomatoes in the sorting belt just about as fast as in the first place, but there was only one lone man on the sorting belt, and he was in a pitiable condition, judging from the smell of his breath, and the tomatoes were running through there at a great rate. I am not going to give you the names of these companies because I think they have endeavored to improve conditions this year, but to go ahead, we found similar conditions in other factories.

When we got back home in the fall we began to look for this catsup, and I happened to be in Aberdeen just at the right time. We have two wholesale houses there, and I happened to be there at the very moment that two carloads of catsup came in, one from each factory that we had visited, and samples were taken to the laboratory and examined and pronounced to be very bad. We intended to seize those two carloads, and I sent an attorney up to Aberdeen with the papers already made out to seize those two carloads, but when he got there there was a murder trial on hand and he could not get the proper attention to seize them. In the meantime one of these large firms got wind of what was going on and they sent their chemist over, and this illustrates conditions as they exist, I think, in some of the factories where men are overworked and have more to do than they can attend to. That man, I believe, thought things were all right, but after looking over the catsup with us, the poor fellow looked as though he was going to cry over the situation. Well, they asked the privilege of withdrawing the car from the state and I allowed them the privilege, as well as the other company that did not send a representative, but that company failed to withdraw the car and I had to bring a little pressure to bear upon them, and the manager of that company never would acknowledge that that catsup was bad, although it was very bad. However, the attitude of many manufacturers, I have found, has been very good. The other firm mentioned, that sent in the second carload to the state, was quick to acknowledge their fault and did not attempt to do any business there until late in the fall, when they said they were certain that their catsup would pass our test, and they notified me in advance and we looked into the matter and found it was all right, and they thanked me for what had been done.

I think that no less than ten manufacturers have come from various places in South Dakota to discuss the catsup situation during the past summer, and it is very plain that some of them have been greatly deceived. We have given more attention to the catsup situation than most people have which will show a little bit of the situation which we found. No less than three large firms, I believe, have been grossly deceived with regard to the situation.

There was a man—I think he is a banker by trade—that brought into the office sixty-eight reports of analyses of catsup which a large commercial laboratory had made for him, all of which were reported to be very good and well within the requirements of the law; bacteria and everything was all right, and when our results were given to them. Well, I think they verified our results by sending to a specialist in Indianapolis some samples, and they found that his work practically checked up with ours. Then he manufactured some catsup, the very worst catsup he could make out of rotten tomatoes and he sent it there, and a fine report was sent back. The name of this laboratory I shall not mention, but it is well known to all of you, and there are not less than three manufacturers who have had the same experience this summer.

Now, after we had issued a bulletin in South Dakota, a certain food journal commented upon this bulletin, and what we had done along the line of catsup in South Dakota, and rather discredited our work as well as the work of other people along the same lines, in that it was not an indication of spoiled tomatoes. I thought for a while that I should answer this article, but concluded to keep still and not say anything, but I want to say—some of you may run up against this same thing or perhaps have done so before this—that we judged not only from the mold but also from the yeast, and the tissues and all that sort of thing. We have not done much along the line of bacteria, but along the line of mold and yeasts we have checked up with a number of analysts throughout the country who really know what they are doing. We have coöperated with two manufacturers in this work, and it is our belief that the standards laid down are right. However, we have been more liberal in our interpretation of results than the law, if strictly followed, would allow. For example, we have allowed 40 molds per 1/60 cubic centimeter, or rather, below 40 I should say, before condemning the

catsup, and we have been liberal along other lines. We thought we could afford to do so the first year, and I think after this we shall perhaps tighten up a little bit.

I believe that is all I have to say.

The Chairman: Any questions? Is there any discussion on this paper?

Mr. Mason of Idaho: The state bacteriologist wanted me to ask if any of the states in the examination of catsup were using that score account for court prosecution, and I would like to ask also. I suppose you have same trouble that we have over there, that a great many of the restaurants buy bulk catsup and then put it into standard bottles. We have found several cases where that has happened, but so far have not gone to court on it.

The Chairman: Standard bottles, bearing the name of a firm that did not make the catsup?

Mr. Mason of Idaho: Yes.

Mr. Barnard of Indiana: If you refer to the work done by the department at Washington you will find that there have been scores of cases carried through the courts involving their seizure. We have done the same thing in Indiana. We rely first on the mold, and then the spore and then the volatile acids, and we have no trouble in winning our cases, and in cases of filling bottles with catsup—take, for instance, Snider's catsup—we know what the analysis shows, and when a bottle of catsup in one of Snider's bottles is taken from a restaurant shows up differently on analysis, it is an easy matter to convict the restaurant keeper, and we have been working on that line.

The Chairman: I find that this concludes the program for the meeting. I am reminded that in making the announcement that we were to meet at the Commercial Club I have been in error. We are to meet tonight at the Chamber of Commerce, at the corner of Columbia and Third avenues, the same place where we met last night. That concludes the meeting.

Mr. Bryan of Illinois. I move that we adjourn.

Motion seconded.

The Chairman: A motion has been moved and seconded to adjourn at this time. Those in favor will say "Aye"; opposed, "No." The ayes have it, and we will therefore adjourn.

(Adjourned at 5 o'clock.)

The departments represented in the convention were as follows:

Alabama.	New York.
California.	North Carolina.
Connecticut.	North Dakota.
Idaho.	Oklahoma.
Illinois.	Oregon.
Indiana.	Pennsylvania.
Iowa.	Rhode Island.
Kansas.	South Dakota.
Kentucky.	Tennessee.
Maryland.	Texas.
Michigan.	United States Department of
Minnesota.	Agriculture.
Missouri.	Utah.
Nebraska.	Washington.
Nevada.	Wisconsin.

Following is an alphabetical registration of the delegates to the convention:

Allen, R. M., Experiment Station, Head, Food and Drug Division, Kentucky.
Allen, W. M., State Food Chemist, North Carolina.
Bailey, J. W., Dairy and Food Commissioner, Oregon.
Barney, W. B., Dairy and Food Commissioner, Iowa.
Billingsley, C. H., Food, Dairy and Drug Clerk, Alabama.
Bryan, T. J., State Analyst, Illinois.
Brown, L. P., Food and Drug Commissioner, Tennessee.
Barnard, H. E., Food and Dairy Commissioner, Indiana.
Caspari, Charles, Jr., Food and Drug Commissioner, Maryland.
Chittick, J. R., State Chemist, Iowa.
Crumbine, S. J., Secretary State Board of Health, Kansas.
Cutler, W. P., Food and Drug Commissioner, Missouri.
Cook, A. N., Food and Drug Commissioner, South Dakota.
Dame, Gilman M., Dairy and Food Commissioner, Michigan.
DeBarr, Edwin, State Chemist, Oklahoma.
Davies, L., Dairy and Food Commissioner, Washington.
Dorset, M., United States Department of Agriculture, Washington.
Dinsmore, S. J., Chemist in Charge of Food Control, Nevada.
Emery, J. Q., Dairy and Food Commissioner, Wisconsin.

Erickson, Albert, Clerk, Illinois.
 Flanders, G. L., General Counsel Department of Agriculture, New York.
 Foust, James, Dairy and Food Commissioner, Pennsylvania.
 Frear, William, Chief Chemist, Pennsylvania.
 Fulmer, Elton, State Chemist, Washington.
 Hansen, Niels P., Food, Drug and Dairy Commissioner, Nebraska.
 Hoffman, R. H., Assistant Chemist, Food and Drug Department, Texas.
 Hansen, Willard, Dairy and Food Commissioner, Utah.
 Harms, Herman, State Chemist, Utah.
 Healey, D. J., Bacteriologist, Kentucky.
 Jaffa, M. E., California.
 Jackson, F. A., Food and Drug Commissioner, Rhode Island.
 Johnson, Charles W., State Chemist, Washington.
 Judd, Ed. T., Chief Deputy, Dairy and Food Commission, Oregon.
 Jones, A. H., State Food Commissioner, Illinois.
 Ladd, E. F., Commissioner and Chemist, North Dakota.
 Loomis, H. M., United States Department of Agriculture, Washington.
 Mason, R. D., Chief Chemist, Idaho.
 McKinley, Charles F., Attorney, Illinois.
 Newman, John B., Assistant Food Commissioner, Illinois.
 Potter, H. F., Dairy and Food Commissioner, Connecticut.
 Rawl, B. H., United States Department of Agriculture, Washington.
 Ross, S. E., Assistant Chemist, Nevada.
 Russell, U. S., Assistant in charge of Food and Drugs, Oklahoma.
 Wallis, James H., State Dairy, Food and Sanitary Inspector, Idaho.
 Willard, J. T., Chemist, State Board of Health, Kansas.
 Winkjer, J. G., Dairy and Food Commissioner, Minnesota.



C. H. BILLINGSLEY,
 Food, Dairy and Drug Clerk of the Alabama Department of
 Agriculture and Industries, whose popularity won for his
 state the next convention.

The following telegram was sent to Secretary of Agriculture Wilson the last day of the convention:

The American Association of Dairy, Food and Drug Officials at its regular annual convention in Seattle, Washington, has unanimously endorsed by resolution the action of President Taft in transmitting to Congress a special message calling attention to the urgent necessity of amending the national food and drug act as made apparent in the decision of the

United States Supreme Court in what is known as the Johnson cancer cure case, and urging Congress to enact legislation covering this defect.

NATIONAL EXECUTIVE COMMITTEE.
 DR. W. P. CUTLER, Chairman.
 JAMES H. WALLIS,
 L. DAVIES,
 W. M. ALLEN, Secretary.

On the return trip from their visit to the salmon, at Bellingham, Washington, on Friday, July 12th, 1912, the delegates of the Association of American Dairy Food and Drug Officials adopted the following resolution:

"Resolved, That we hereby tender to the Alaska and Puget Sound Salmon Packing industries our thanks and appreciation for their courtesies on the trip to the salmon packing plant at Bellingham, Washington, and to assure them that the visit afforded the commissioners opportunity to have a better understanding of these great industries.

CONVENTION OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The sixtieth annual convention of the American Pharmaceutical Association will open in the Brown Palace Hotel, Denver, on August 19th, and continue six days. The following tentative program has been prepared by the general secretary of the association:

Monday, August 19—9:00 A. M., meeting of the Council; 10:30 A. M., meeting of the National Association of Boards of Pharmacy; 3:00 P. M., first General Session; 9:00 P. M., President's Reception.

Tuesday, August 20—9:00 A. M., meeting of the Council; 10:00 A. M., second General Session; 3:00 P. M., Section on Commercial Interests; 8:00 P. M., Section on Commercial Interests (second session); 8:00 P. M., meeting of the Conference of Pharmaceutical Faculties.

Wednesday, August 21—9:00 A. M., meeting of the Council; 10:00 A. M., Section on Education and Legislation; 3:00 P. M., Section on Practical Pharmacy and Dispensing; 3:00 P. M., Section on Education and Legislation (second session); 6:30 P. M., Separate Reunions of College Alumni; 9:30 P. M., Smoker.

Thursday, August 22—9:00 A. M., meeting of the Council (Organization of the Council for 1912-13); 10:00 A. M., Section on Scientific Papers; 3:00 P. M., Section on Scientific Papers (second session); 8:00 P. M., Section on Practical Pharmacy and Dispensing (second session); 8:00 P. M., Joint Session of Boards of Pharmacy and Section on Education and Legislation.

Friday, August 23—8:00 A. M., mountain excursion to Glacier Lake, visiting en route the University of Colorado and Boulder; Chautauqua entertainment by the citizens of Boulder; returning to Denver at 6 P. M.; 8:00 P. M., Section on Historical Pharmacy.

Saturday, August 24—9:00 A. M., meeting of the Council; 10:00 A. M., final General Session.

In addition to the entertainments of the general program printed above, the local committee has arranged for the following special excursions and entertainments for the ladies in attendance:

Tuesday, August 20—9:00 A. M., fifty mile trolley ride, visiting the foothills about Denver; 8:00 P. M., concert and moving pictures by E. C. Fine, of Boulder.

Wednesday, August 21—9:00 A. M., seeing Denver in automobiles; 2:00 P. M., matinee at Elitch's Gardens; battle of the Monitor and Merrimac; Zoölogical Gardens; 8:00 P. M., toast banquet tendered by the ladies of the Denver State Pharmaceutical Association.

OBITUARY.

T. A. Snider, the millionaire head of the T. A. Snider Preserve Company of Cincinnati, and his bride, were instantly killed on June 17th when their automobile, in which they were taking a honeymoon trip, was struck by a train in Erie, Pennsylvania. They were married about three months ago, the bride being Mrs. Stanton, widow of a Philadelphia woolen manufacturer.

Peter Hohenadel died on June 23d at Janesville, Wisconsin, following an operation for appendicitis. Mr. Hohenadel was one of the really big packers of the country, counted by some as the largest vegetable canner in the business, and had worked his way steadily but rapidly to the top within the past few years. He was the head of more than half a dozen large canneries in the West, packing principally corn and peas. He is survived by a wife and several brothers and sisters.

What the Other Fellow Thinks

Packaged Goods and Their Prices.

New York state has a new law providing that containers of foodstuff must display in definite terms the character and quantity of their contents. It is a good enough law, but the anticipation voiced by several of the newspapers that it will help in the campaign against the high cost of living is probably overdrawn. Many of the package goods, under the operation of previously enacted laws, do not bear any statement of the quantity. There is simply a package of whatever the article may be, and the customer takes it for whatever it weighs or measures. Now the claim is made that thereby the buyer is made a victim of short-weighting, and the New York law follows.

The theory is simple. It merely assumes that manufacturers of food articles are perforce crooks, and that they put up packages of breakfast foods, starch, baking powders and so on chiefly for the purpose of defrauding the buyer. In that case, the law is necessary. A package of oatmeal should not merely look as if it might weigh a pound—it should weigh a pound. Confusion to the fraudulent, and very well. But we fancy that in the long run the prices of the package goods will not be varied greatly on account of this new law—when price is adjusted to quantity. In the matter of a competitive article selling at ten cents, the buyer is usually getting all that the manufacturer thinks he can furnish for the money. If fifteen-sixteenths of a pound is the economic limit of ten cents' worth, then a pound is going to be worth a little more, and either the purchaser has got to pay more in money, or the difference is going to be taken out in quality. We have no doubt that with the competition which prevails in almost all package goods, manufacturers, who certainly want trade, generally aim to attract customers by providing as good an article and as much of it as they can. Since the custom of the trade in most of these articles is to charge a round sum for the package, the natural method when advance becomes necessary is to decrease the quantity rather than to increase the price. One is the same thing as the other in effect, though one influences pounds and ounces and the other acts upon cents. It is an illustration that sometimes there can be two equally truthful and exact ways of stating the same proposition.

It is, of course, desirable that the consumer shall know how much he is getting of an article. But, in the long run he will get about what his money is worth. When he pays twelve cents he will receive more in exchange than when he pays ten cents, no matter what it says on the outside of the package. —*New Bedford Standard*.

Using Lime in Cream a Bad Practice.

It is a fact to be regretted that many of the centralizers (we hope none of the smaller creameries are guilty) continue to violate and hold in contempt the law which prohibits the use of lime in cream, from which butter is to be made. Reports come to us telling of creameries where, not a solution of lime water, but the lime itself, is dumped in generously. Sometimes a solution of sal soda is used and the batch pasteurized and saltpetre added to sweeten it.

The dairy and pure food laws of Minnesota specifically state that "cream . . . which contains any foreign thickening or coloring substance, or any abnormal ingredient whatsoever, shall be deemed adulterated; nor shall any article of food be manufactured from unwholesome or adulterated milk or cream, etc." Other state laws are similar. Yet the liming practice continues. We dare say that the creameries that accept any old kind of cream and put it through such a process are doing more to injure the whole dairy business than any other one factor. The consuming public are not to be fooled all the time. As the old saying goes, "Murder will out." People do not have to be informed that poor butter is not poor butter, for they know better. Butter from limed cream retains its "doctored" flavor in spite of all that is said to the contrary, and when the facts are laid bare it cannot help but injure the butter business.

"Well, someone says, 'what are you going to do when the rotten cream comes in, dump it in the drain?' No, not by any means. The creameryman that accepts such cream in the first place is more fit to run a tannery than he is a creamery. Go after the producing end and get a better grade of cream. Make good starter and use it liberally and regularly. Put in as much time improving what comes into the factory as you have been putting in trying to improve what goes out, and

you will be doing something of lasting benefit both to yourself and the industry in general.—*Butter, Cheese and Egg Journal*.

Believe in Restrictive Law.

For fear there might be a disposition on the part of some who are none too friendly toward the dairy interests to charge that the dairymen and the creamery interests do not want any restrictions whatever placed upon the manufacturing and sale of butter, we desire to say such is not the case. Those of the dairy interest recognize the necessity of restrictive laws governing the character of the product they are offering the consumers; they recognize the necessity of the enforcement of sanitary laws passed with a view of the protection of the public health, and they also recognize the justice of the enforcement of a law protecting the consumer in the value of the product they are offering for sale. In other words, they recognize the justice of the present law governing the moisture content of butter, but, at the same time, they demand a just and fair enforcement of that law.

In the many meetings of the allied dairy interests under the head of the National Dairy Union, in which every phase of dairying and buttermaking has been given the most careful consideration, the opinion has been unanimous in favor of this law. The dairymen recognize the right of the consumer, and, at the same time, they are aware of the tendency of certain manufacturers to get all they can for their product—get it honestly if they can, but get it anyway.

We have said many times, and we believe we are expressing the opinion of all good dairymen and manufacturers, that the man who knowingly and intentionally sells water for butter or exceeds fifteen and fifteen-sixteenths of moisture in his butter, is entitled to no more consideration than the man who sells oleomargarine for butter.—*Chicago Dairy Produce*.

A National Board of Health.

The United States Senate has caused to be printed a memorial on the conservation of human life which is part of the study of the question of establishing a national Board of Health such as Doctor Wiley recommended so strongly before he left office. The stumbling block in the way of Dr. Wiley's proposal is the widespread distrust of doctors which exists in this country. Even such a well-established fact as the usefulness of vaccination in checking the ravages of smallpox is hotly disputed by a minority of the people that is by no means small in numbers. Against it also are the interests of the patent medicine manufacturer. All doctors condemn all patent medicine, but the people believe that some patent medicines are just as good as some doctors, and are unwilling to have their representative in Congress do anything that will give the doctors of a class any more authority than they now possess.

Even in life insurance circles a growing disposition to discount the opinions of physicians is apparent. Experience has proved that if a man survives for one year after taking out a life insurance policy and has not at the end of that time developed marked symptoms of some fatal disease, that he is a much better risk from an insurance point of view than the applicant the medical examiner certifies as being sound of wind and limb and otherwise a good subject for life insurance. —*New York Commercial*.

Excessive Use of Salt Injurious.

Salt used in moderation is necessary to health; taken to excess it is productive of serious diseases. Cataract, weeping eyes, susceptibility to colds, gastric ailments, constipation, chills, fever blisters and melancholia are some of the commonest ailments from excessive indulgence in this condiment. A kitten, with two grammes of table salt injected into its stomach, will develop cataracts in both eyes within three hours. Horses fed on salt marshes become blind from cataracts very soon. Of people who have cataracts a very large proportion are extreme users of salt. Excessive sugar eating will also induce this affection of the eyes.

Some people cover their food with salt, and to them nothing tastes good unless it is so treated. I have known old ladies to put salt into their tea. Such people cannot readily be cured of any of their troubles unless this habit is discontinued. Like whisky and black pepper, the great use of salt produces a desire for more of itself, and the more it is used the more it is desired. So that a craving for salt is not an indication that the system needs it, but the reverse. By cutting down the amount taken for a few weeks the desire for it passes away.

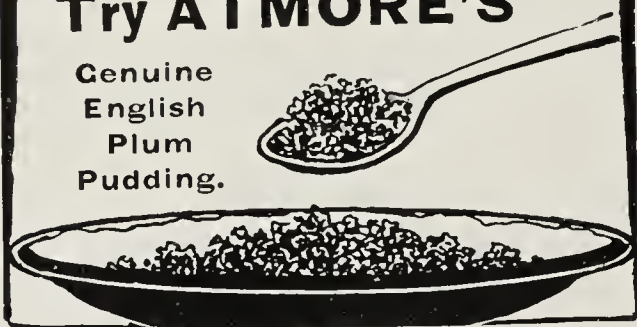
If, therefore, people would avoid the above-mentioned troubles let them avoid this active agent in their production and take the antidotes which nature has so abundantly furnished.—*"Medicus" in Chicago Evening Post*.

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Manufacturers of Saccharin
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THE AMERICAN FOOD JOURNAL



VOLUME SEVEN
NUMBER EIGHT

Chicago, August 15, 1912

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2 tablespoonfuls sugar	1 tablespoonful salt

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THE AMERICAN FOOD JOURNAL



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Shall We Abandon Fresh Milk?

By Robert Emmet Wood.

The recently passed Chicago milk ordinance presents some features that appeal to milk dealers as unnecessarily drastic. Considering how readily fresh milk may be made the vehicle of dangerous disease germs, and how fruitful contaminated milk is of death to small children, and adults as well, and considering also the difficulties of securing adequate protection from these dangers, it is well to consider the possibilities of a substitute for this almost universal food—that is, fresh milk in raw or pasteurized form—or secure its delivery to the consumer in a form in which there can be no question of its safety. Sterilized milk is largely used in cities. It comes in tin cans, both sterilized and reduced by evaporation. It is cheap and safe. The need for a safe form of domestic milk in cities points to sterilized and evaporated milk and clears the way for its adoption, either through education generally disseminated concerning the dangers of our present and popular form of milk, or by legislation. A germ-free milk, a sterilized milk, is a crying necessity.

The Chicago ordinance, referred to above, provides as follows:

All milk transported to or delivered in Chicago to be maintained at a temperature not higher than 60 degrees F. (After July 1, 1913, 55 degrees F.)

All milk to be pasteurized unless of grade defined as "inspected."

Inspected milk to be produced in dairies inspected and holding permit from Commissioner of Health on complying with the following conditions:

All cases of contagious or infectious disease on any dairy farm to be reported at once to Health Commissioner, and output of milk from such farm to cease until danger is removed.

Inspected milk to be produced on farms scoring not less than 65, based on the following points: Conditions and health of cows, bedding, stable temperature, cubic foot space per cow, feed and water, location and construction of stable, etc., including light and ventilation and drainage of stable yards; location, construction and equipment of milk rooms;

pails, utensils, water supply; clean milking suits; cleanliness of milkers, cows, stable and stable yard; disposal of manure; cleanliness of milk room and utensils, prompt cooling of milk after milking; temperature conditions in storing and transportation.

Cows to be certified free from tuberculosis, etc., and diseased cattle not to be kept in milk herd. Feeding on slops, refuse, glucose, etc., forbidden.

Sterilization of utensils. No persons to be employed or permitted to work on farms unless demonstrated to satisfaction of Health Commissioner that he is not a typhoid or diphtheria carrier.

Inspected milk offered for sale to be contained in tightly closed and capped bottles or similar receptacles approved by the Commissioner, labeled "inspected milk" in letters of given size, and the day of the week on which milk was bottled to be plainly marked on the cap or stopper.

Inspected milk shall not yield more than a perceptible amount of sediment or stain other than that of natural butterfat when a pint sample is filtered through a pledget of cotton 1 inch in diameter, and shall be entirely free from disease-producing bacteria, or other matters dangerous to health.

Inspected milk to contain not more than 75,000 bacteria per c. c. (cream 150,000) from October 1 to May 1, inclusive, and not more than 125,000 bacteria (cream 300,000) from May 2 to September 30, inclusive.

Pasteurized milk to be produced on farms scoring not less than 55 on points previously mentioned; obtained from cows free from disease; kept clean and not fed refuse, etc.; utensils cleansed and sterilized. Persons living on farms to be free from contagious or infectious disease.

Milk to be strained and cooled to 60 degrees F. immediately after milking (55 degrees F. after July 1, 1913), and kept at this temperature until pasteurized; not to yield more than a perceptible amount of sediment, etc., as above, and shall not contain more than 750,000 bacteria per c. c. (cream 800,000 bacteria), from October 1 to May 1, inclusive, and not more than 1,000,000 bacteria per c. c. (cream 1,500,000) from May 2 to September 30, inclusive.

Commissioner of Health to inspect and approve pasteurization plants permitted to supply milk to the city. Milk and cream to be heated to such temperature as will kill 99 per cent of the bacteria, all pathogenic bacteria, and cause milk to show no colon bacilli in 1 c. c. Recording apparatus required to record temperature during pasteurization.

All pasteurized milk containers to be labeled "pasteurized milk" and cap or stopper of bottles shall bear name of day of the week upon which milk was bottled.

After January 1, 1914, all milk, etc., not "inspected" to be pasteurized for not less than twenty minutes at a temperature not less than 140 degrees F. or five minutes, temperature not less than 155 degrees F. Pasteurized product to be cooled at once.

The ordinance itself is only palliative of conditions which it aims to cure, and absence of knowledge or understanding of the facts surrounding the production, transportation and storage of milk is likely to result in disaster to city consumers who will persuade themselves that with the ordinance passed and ready to be enforced as soon as it goes into effect all of the evils surrounding their milk supply are done away with.

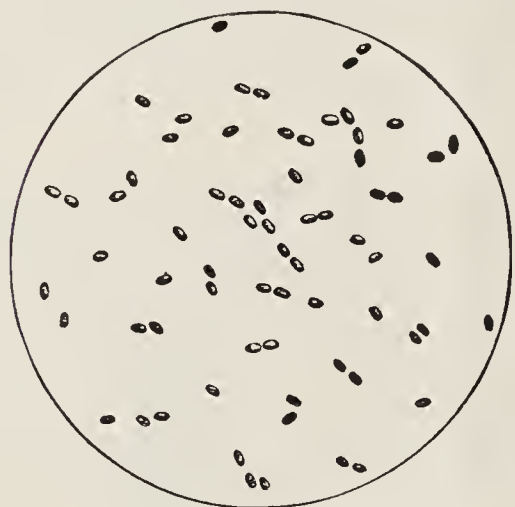
Pasteurization, even supposing it to do what its advocates claim for it in preventing the multiplication of pathogenic bacteria during the period in which it is likely to be held before consumption, has not demonstrated its ability to destroy all bacillic or germ life, and much of the fear that those dead bacilli created by the pasteurization process from dangerous toxins is sufficiently well founded to merit attention. This condition would only ensue in low grade milk and the use of such milk for pasteurization the ordinance seeks to prevent by establishing a scoring standard

ably are introduced into the milk with the hair, bits of feces, and dust that fall into the milk in the barn. Milk is an excellent medium for the growth of lactic-acid bacteria, and under favorable temperature conditions they multiply with astonishing rapidity.

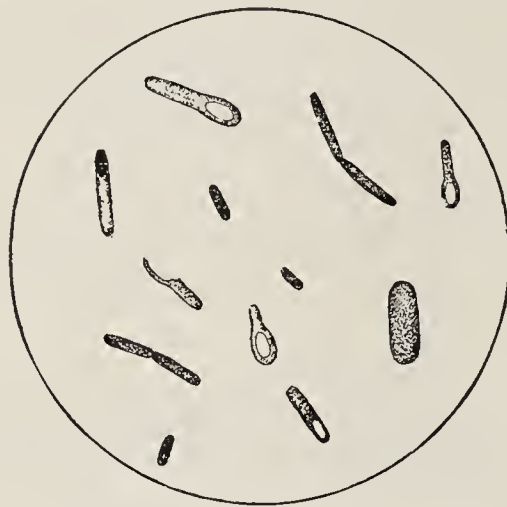
The acidity of the milk is so closely connected with the life processes of this group of bacteria that it may be taken as a rough measure of their development. The acid, as fast as it is formed, unites chemically with the casein, which exists as very fine particles suspended in the milk serum. When the acid reaches a certain per cent, the acid casein is precipitated, and the milk is said to have "curdled" or "clabbered." This result may be hastened by heating. If milk or cream that is slightly sour is added to hot coffee, or is otherwise heated, it curdles.

Milk which has undergone a strictly lactic-acid fermentation has a firm curd, free from gas bubbles, and with a small amount of whey on the surface. When shaken the curd breaks up into small particles which settle slowly, leaving a clear whey. The milk should have a pleasant acid taste. So far as is known, none of the products of the bacteria of this group is of a poisonous nature.

Some of the bacteria sometimes classed with the lactic-acid bacteria form acids other than lactic, to-



Typical Lactic Acid Bacteria.



Bacteria of the Rod-Shaped Type.



Bacteria With Hair-Like Filaments.

TYPES OF BACTERIA FOUND IN MILK.

of 55 for milk going into the pasteurized grade. That this standard is sufficiently high will be disputed and lead to criticisms of the adequacy of the safeguards of the ordinance.

An examination into the bacteriology of milk is not unimportant in a discussion of such preventive measures for a bad milk supply as are sought in the Chicago ordinance. Bacteria are simply minute organisms having the attributes of animal or vegetable life in their earliest forms. It is probable that some bacteria are vegetable, while others are animal. Many of these organisms find sugar a suitable food. In making use of this food, the sugar is chemically changed and in its place we find many new chemical compounds differing widely from the sugar from which they originated. Some bacteria in this process form various kinds of acids and gases. Among these is a large group of closely related bacteria which cause the souring of milk by breaking up the milk sugar into lactic acid. On account of this peculiarity they are commonly called the lactic-acid bacteria. Typical lactic-acid bacteria do not form gas. Some forms have no spores and therefore are destroyed at a comparatively low temperature. They are extremely widely distributed, and it is only under exceptional conditions that milk is obtained entirely free from them. They seldom or never occur in the udder itself, but prob-

gether with large quantities of gas. Milk curdled by bacteria of this class shows gas bubbles and has a disagreeable taste.

Not only are the lactic-acid bacteria able to grow in an acid medium, but to a certain point the acid is a favorable influence. Many bacteria, however, find the acid detrimental to their development and are not able to grow long in milk in competition with lactic-acid bacteria. When the milk begins to taste sour, the growth of nearly all nonacid-forming bacteria is checked. The activity of the lactic-acid bacteria themselves is checked and finally ceases entirely when the acid reaches a certain concentration, which varies with different varieties. Consequently sour milk usually contains a nearly pure culture of one or at most two or three closely related varieties of bacteria.

If a stoppered full bottle of ordinary raw milk is allowed to stand in a warm room for several days it usually develops a very sharp acid taste and frequently a somewhat slimy condition. This is due to the growth of a group of bacteria which occurs normally in milk but in small numbers only and which develop when certain favorable conditions are provided. They sometimes produce two or three times as much acid as the ordinary lactic-acid bacteria. In Turkey and neighboring countries milk fermented with these bacteria is a common article of food. In recent years

the public has become familiar with these bacteria under the name of *bacillus bulgaricus* or the Metchnikoff bacillus.

While the lactic-acid bacteria are considered very beneficial in butter and cheese making, they are undesirable bacteria from the standpoint of the milk dealer or consumer. It is almost out of the question absolutely to prevent their presence in milk, but the initial number may be much reduced by observing a few simple rules of cleanliness in handling the milk. Every precaution which reduces the amount of dirt in milk reduces the number of bacteria correspondingly.

Heat is frequently applied to milk to destroy a part or all of the bacteria. Complete destruction of all bacteria in any substance is sterilization; pasteurization is a term used to designate a process of heating by which milk or other fluids are heated to destroy part, but not all, of the bacteria. Pasteurization may be by the "flash" method in which the milk, flowing in a continuous stream, is heated and cooled very quickly, or the "holder" process in which the milk after being heated is held or retarded so that the temperature is maintained 20 or 30 minutes.

The temperature of pasteurization, as it is ordinarily practiced, varies greatly. As a general rule, to insure good results, the temperature must be increased as the length of exposure is decreased.

When the milk is held twenty to thirty minutes the best temperature is 145 degrees F., according to L. A. Rogers, dairy bacteriologist of the United States Department of Agriculture. This is safely above the point at which the bacillus of tuberculosis is destroyed and below the temperature at which changes take place in the milk. Pasteurization at this temperature does not destroy all of the lactic-acid bacteria; consequently the milk will become sour before other bacteria have produced undesirable changes.

In the continuous machines, where the milk is maintained at the pasteurizing temperature usually for only twenty-five or thirty seconds, the temperatures used range from 160 degrees F. to 185 degrees F. The results at 160 degrees F. are uncertain, and any temperature below this point has little or no beneficial effect. Milk may be efficiently pasteurized in the household by setting the bottle of milk in a vessel containing water and heating the water until the milk reaches a temperature of about 145 degrees. The bottle should then be taken from the water, wrapped in a towel and held twenty to thirty minutes. It should be then chilled at once and kept cold until used. Milk should in all cases be used within twenty-four hours after delivery.

Pasteurization should not be confused with sterilization. Even when the former is efficiently done many bacteria survive the heating and the milk must be properly cared for until it is used. Milk may be sterilized by repeated boilings. This is usually accomplished by steaming on three or four successive days. After each boiling it should be held at room temperature for 24 hours to allow the spores to germinate and reach the vegetative stage. However, this method is by no means certain, especially if the milk contains a large number of bacteria, and to insure sterilization it is necessary to expose it to a temperature above the boiling point, which may be done in one operation by holding it in a closed chamber with steam under pressure.

Milk can also be sterilized by chemical means. The

so-called "Buddeized" milk is sterilized by adding a small amount of hydrogen peroxid, which acts energetically on bacteria and is itself slowly decomposed into two harmless substances, oxygen and water. Milk treated in this way is said to be not entirely free from an objectionable taste and the sterilization is not always certain.

While bacteria are in no way essential to milk, they may be considered as normally present in milk, cream, ice cream, butter and cheese. They may even occur in milk or its products in very large numbers without making it an unsafe food or in any way decreasing its food value.

Bacteria known to produce disease are seldom isolated from or counted in milk, and bacteriological counts should be taken merely as an indication of the way in which milk has been collected or the temperature at which it has been held. High numbers usually indicate insanitary conditions, careless handling, or old milk. However, milk may be collected under very poor conditions and the bacterial count held down by a liberal use of ice. On the other hand, milk collected in the most sanitary manner may in a few hours contain a large number of bacteria if it be held at a high temperature. Low counts may be due not to clean stables, and low temperatures, but to the use of antiseptics.

Every effort should be made by legitimate means to secure milk with a small number of bacteria, but milk or foods made from milk should not be indiscriminately condemned because they sometimes contain bacteria in numbers which are startling to those not familiar with the nature of these indispensable plants.

It is now generally recognized that many of the diseases which may be communicated from one person to another are caused by specific bacteria. The organisms causing some of these diseases have not yet been discovered, but the causal bacteria of many have been isolated and studied in detail. Some of these diseases occur usually only in human beings, others occur usually in animals and are only occasionally transmitted to men, while others may occur with equal frequency in both man and animals.

It is well known that certain diseases are sometimes disseminated through milk. By this means an epidemic may appear suddenly and last for a comparatively short time, or the infection may be continued for a long period and the development of the disease be so slow and obscure that the source is unknown.

Tuberculosis is an example of the latter class. So much in regard to this disease is still unknown, so many widely separated views are held, even by those most familiar with the subject, that it is impossible to make positive statements. However, tuberculosis has been studied in such detail that many facts have been well established, and many theories advanced are so probable that they can not be disregarded until they are disproved.

The question of the identity of tuberculosis of man with that of animals has been raised, and while it is not yet accepted as a fact by all investigators, a large majority of the people whose opinion has weight believe that the two diseases are identical. Assuming that they are, much difference of opinion exists as to the possibility of transmission from cows to man through milk. But the possibility of such infection must be recognized and guarded against.

A number of epidemics of diphtheria and scarlet fever have been traced to the milk supply. In diseases

of this nature the milk is infected by some one suffering from an attack of the disease, or through some one who has been in contact with the patient. Obviously no one suffering from a contagious disease, or one who is caring for a diseased person, should be allowed to go near the stables or milk room or handle milk utensils. The only really safe way is to enforce strict quarantine against farms where contagious diseases are known to exist.

Typhoid fever, while not as contagious as some other diseases, is readily communicated from one person to another. The ordinary channel of communication is generally considered to be the drinking water, which may be contaminated by sewage, but occasionally it is disseminated through the food. Milk may become infected with this disease in various ways. Contaminated well or spring water may find its way into the milk through milk pails, cans, or bottles which were not thoroughly scalded after rinsing in cold water; the cans or bottles of milk may be left to cool in contaminated water and become inoculated by the accidental addition of even a few drops of water; the cows may wade in water or mud containing the typhoid bacillus and the small drops of muddy water which dry on the animal's flank may carry the organism to the milk; or flies may go directly from the waste from the sick room to the milk or milk utensils.

It has been demonstrated in the last few years that certain people may carry and give off from their bodies virulent disease-producing bacteria, even though they may be in good health. This is especially true of typhoid fever, and there is no doubt that dairymen have in many instances been the cause of serious epidemics without any outward evidence that they harbored the bacteria of the disease. Diphtheria and affections of the throat are also known to have been disseminated in this way.

In this connection must be considered the summer intestinal diseases of children. While the specific bacteria causing these troubles have not been recognized, it is generally accepted that they are carried by the milk and that this is the important factor in their control. It is evident that they are closely associated with the use of milk which contains large numbers of bacteria. It is reasonable to suppose that by the continued use of poor milk many of these bacteria lodge in the intestines and there produce substances of a toxic nature. It has been proved by careful observation and statistics that the death rate among babies in the crowded cities can be materially lessened by supplying them with good milk.

Men are of different minds as the efficacy of inspection or of pasteurization to accomplish the safeguarding necessary for so important and universal food supply as milk. But there is no question of the safety of sterilization. The evaporated and sterilized milk of commerce presents all the elements of the fresh article with absolute safety. It is, moreover, cheap. With much of the moisture eliminated, there is a lessened expense in transportation, which is a great share in the expense of production of fresh milk.

To produce evaporated milk that is a salable article it is absolutely necessary that the milk be of very superior quality, for anything in the least abnormal in cow's milk will be multiplied many times in the finished product. To prevent this from happening a manufacturer of a first-class evaporating plant maintains at considerable expense an efficient corps of dairy inspectors. These inspectors make suggestions and

recommendations to the producers that will prevent any defective milk being sold the manufacturer, and moreover these suggestions are compiled with, because if they are not, the milk is shut out. This method is far more effective than any municipal regulation or inspection could possibly be. Dairying in the vicinity of a milk condensing plant is always in an advanced state. These dairy inspectors have three cardinal mandates for the producers: the milk must be from healthy cows, clean and cold. Wherever else the dairyman may try to palm off stale, dirty, warm or diseased milk he finds it impossible to dispose of it to the manufacturers of evaporated milk. Yet this defective milk is quite often to be found in the milk depots of the cities.

The milk is aerated and cooled as it comes from the cows. The cans of milk are then set in tanks of cold water, pumped in most cases by an up-to-date gasoline engine. When at the right temperature the cans are loaded on the wagon and covered with a heavy canvas cloth to protect the cans from heat and cold and dust. Arriving at door the cans are inspected very carefully by the weighmaster of the plant, then emptied and sterilized with high pressure steam before being returned to the farmer. This insures a clean receptacle for the milk, when taken from the cows. The milk that has been received is conducted into a large storage vat, cooled with large copper coils through which ice water is sent. The huge vat is covered with a wire screen to keep out the flies and dust. Here as it is needed it is drawn into a large open kettle and live steam turned in to warm it before it enters the evaporator or vacuum "pan." This huge cauldron gulps down twelve hundred gallons of the farmers' milk at one operation. The air having already been exhausted from this apparatus, the milk rolls and tumbles furiously about the sides under the action of the heat until it is thoroughly homogenized and well emulsified. Because of the fact that there is no air in the evaporator the milk is boiled without being cooked or scorched. As it boils, ten gallons of water are taken out every minute by the large vacuum pump. All the time the milk is becoming thicker and thicker.

When the expert in charge of this operation decides that it is finished and the milk has reached the desired creamy consistency, he turns off the heat, admits the air and the milk flows out to the cooling coils.

To sum up:

Pasteurization, however great a safeguard it may be, is the prop of carelessness.

Inspection, to be efficient, requires great vigilance.

Neither method is an absolute guaranty of safe milk.

Sterilized and evaporated milk, delivered to the consumer in hermetically sealed packages, is the milk for those who seek absolutely hygienic conditions.

DAIRY CONFERENCE IN BOZEMAN.

An important conference of western and northwestern dairymen was held in Bozeman, Montana, July 18th and 19th. Sessions were held in the assembly hall of the Montana Agricultural College. Those participating in the program were: J. G. Winkjer, Dairy and Food Commissioner of Minnesota; R. F. Flint, Dairy Commissioner of North Dakota; Prof. F. B. Linfield, director of the Montana Experiment Station; James H. Wallis, Dairy, Food and Sanitary Inspector of Idaho; Willard Hansen, Dairy and Food Commissioner of Utah; Prof. G. L. Marten, Agricultural College, North Dakota; Prof. J. H. Frandsen, Lincoln, Nebraska; W. R. Allen, Lieutenant Governor of Montana, and others.

The Law and the Food Manufacturer

Boric Acid Preservatives Forbidden in Illinois.

In a decision just rendered by Judge Freeman K. Blake of the Municipal Court of Chicago, the sale of food preservatives containing boric acid is declared illegal in Illinois.

Inspectors of the Illinois Food Commission had found a food preservative on the market, being sold as a "canning compound," which contained boric acid. Suit was commenced against the manufacturer under a section of the Illinois food law which forbids the advertisement for sale or sale of unwholesome and deleterious food preservatives. No proof was received by the court concerning the unwholesomeness of boric acid, but reliance was placed on another section of the law which declares boric acid and similar preservatives unwholesome.

The principal contentions of the defendant were as follows:

1. The section forbidding the sale of unwholesome preservatives was unconstitutional, because it was not included in the title of the act.

2. That the legislature had no right to declare boric acid and similar preservatives unwholesome, but that evidence must be introduced in each case to that end.

It was in the nature of a test case, and extended arguments were made and briefs filed. After having the case under consideration for some time, Judge Blake sustained all the contentions of the Food Commission. This is probably one of the first instances where the sale of an unwholesome preservative not mixed in a food has been held illegal.

Mr. Charles F. McKinley, attorney for the Illinois Food Commission, prosecuted the case, and Mr. E. L. Jayne of Minneapolis appeared for the defendant.

The Court's opinion is as follows:

"In this case the parties have submitted the case on a stipulation as to the facts. The questions raised are principally questions of law. The stipulation of facts shows that the defendant, W. T. Price, on or about August 30, 1911, at Chicago, in said county, offered for sale and sold two packages of preservative known as 'Mrs. Price's Canning Compound'; that said canning compound contained boric acid; that the label on said package bears the following statement: 'It is not claimed for this compound that it contains anything of food value, but it is an antiseptic preparation, and among its many uses may be employed to prevent canned fruits and vegetables from souring and spoiling.' Along with this stipulation of facts as an exhibit, which is made a part of the evidence, is the wrapper of the package which contains the statement set forth in the statement of facts.

"The state food law is entitled, 'An act to prevent fraud in the sale of dairy products, their imitation or substitutes, to prohibit and prevent the manufacture and sale of unhealthful, adulterated or misbranded food, liquors or dairy products, to provide for the appointment of a State Food Commissioner and his assistants, to define their powers and duties and to repeal all acts relating to the production, manufacture and sale of dairy and food products and liquors in conflict herewith.

"Section 8 of the act provides: 'That for the purpose of this act, an article shall be deemed to be adulterated,' in the case of food (I omit clauses one, two, three and four, and coming to clause five), 'if it contains any added poisonous or other added deleterious ingredient which may render such article injurious to health: Provided, that when in the preparation of food products for shipment they are preserved by an external application, applied in such a manner that the preservative is necessarily removed mechanically, or by maceration in water, or otherwise, and directions for the removal of said preservatives shall be printed on the covering of the package, the provisions of this act shall be construed as applying only when such products are ready for consumption: and formaldehyde, hydrofluoric acid, boric acid, salicylic acid and all compounds and derivatives thereof are hereby declared unwholesome and injurious.'

"Section 22 of the act provides: 'No person, firm or corporation shall manufacture for sale, advertise, offer or expose for sale, or sell, any mixture or compound intended for use as a preservative or other adulterant of milk, cream, butter or cheese, nor shall he manufacture for sale, advertise, offer or expose for sale, or sell any unwholesome or injurious preservative or any mixture or compound thereof intended as a preservative of any food: Provided, however, that this sec-

tion shall not apply to pure salt added to butter and cheese.'

"Those are the provisions of the law which the state invokes in bringing this proceeding, and against which the defendant defends.

"The statement of facts shows that the article offered for sale was a preservative in the language of the agreed statement of facts, known as 'Mrs. Price's Canning Compound,' and that said canning compound contains boric acid. The clause quoted from the exhibit is as follows: 'It is not claimed for this compound that it contains anything of food value, but it is claimed to be an antiseptic preparation, and among its many uses may be employed to prevent canned fruits and vegetables from souring and spoiling.' The agreed statement of facts clearly shows that the preparation in question was a compound. What its other ingredients were does not appear. An averment is made that it contains boric acid. What else it contained there is nothing to show, but there is a clear state of facts agreed upon showing that it was not pure boric acid. It was boric acid mixed with something else, whatever that was.

"Now, it is contended by the defendant, in the first place, that Section 22 of the Illinois dairy and food law is invalid and unconstitutional in that it legislates with reference to matters not included in the title of the act. That is the first objection raised to this proceeding.

"Section 22 is the section of the act under which this prosecution is proceeding. The title of the act, as indicated, is, among other things, 'to prevent the manufacture and sale of unhealthful, adulterated or misbranded foods, liquors or dairy products.' In Section 22, the provision is that no person, firm or corporation shall manufacture for sale, advertise, offer or expose for sale, or sell any mixture or compound intended for use as a preservative or adulterant of milk, cream, butter or cheese, nor shall he manufacture or sell, advertise, offer or expose for sale, or sell any unwholesome or injurious preservative or any mixture or compound thereof intended as a preservative of any food.

"The provisions in the title of the act which go to the prevention of unhealthful food or adulterated foods, in my judgment, is sufficiently broad to cover the provisions of Section 22, in question in this case.

"Section 22 is, among other things, aimed at the prohibition of the manufacture or sale of unwholesome or injurious preservatives or any mixture or compound thereof intended as a preservative of any food.

"Manifestly the legislature recognized the fact that in this day and age many foods are properly treated with preservatives in order to keep them the necessary length of time. That fact is shown by the implied provisions of Section 22 which does not abolish the use of all preservatives. It says: 'Unwholesome or injurious preservatives or mixture or compound, intended as a preservative.' Therefore the act, in accordance with the title of the act, recognizes the right to use preservatives in food; and therefore preservatives, to be used in food, for the preservation or keeping of those foods, became an element of food-products. In other words, all of the provisions of Section 22 so far as they undertake to prevent the sale and manufacture of unwholesome or injurious preservatives of food come within the title of the act, formed against unhealthful, adulterated or misbranded food, and in my judgment therefore are covered by the terms of the title of the act.

"The next point made against the prosecution is that it is necessary in this proceeding to prove that the preservative mentioned in this agreement of facts, and in the statement of claim, are injurious in order to maintain the case. It is true that no proof except the statement of facts agreed upon has been submitted to the court. The court therefore must look to the statement of facts and to the law to see whether it is necessary to submit proof that the so-called preservative is an injurious product and one prohibited by the law.

"The agreed statement of facts clearly states that it is agreed between the parties that this preservative contained boric acid. Clause 5 of the second sub-division of Section 8 provides with reference to preservatives 'that formaldehyde, hydrofluoric acid, boric acid, salicylic acid and all compounds and derivatives thereof are hereby declared unwholesome and injurious.'

"As a matter of law, therefore, the legislature has undertaken to declare that any compound or preservative contain-

ing boric acid is unwholesome and injurious. The stipulation and the declaration of the law on the face of it, make out a case against the defendant. It seems that it is not necessary for the people in a case of this kind to prove that it is injurious. The legislature has declared that it is injurious.

"A point is made in this connection by the defendant to the effect that such a declaration declaring an element or product injurious, *per se*, is unlawful. The point is made that the legislature might declare that any wholesome food, any well-known wholesome food, to be injurious and that it would be a question at once whether the court would not declare such an act invalid. If the legislature should declare that a food such as bread or any other well-known food product, was injurious—whether that would be invalid—need not be determined at this time.

"The question undoubtedly is one that has two sides. If the legislature should undertake to declare something unwholesome and injurious, which all reasonable people know, as a matter of common every day experience, is wholesome and not injurious, I think undoubtedly the court would take judicial notice of the fact that the legislature had simply made a mistake. Here, they have undertaken to declare that boric acid is injurious, and unless the court can say, as a matter of common knowledge, that the legislature has made a mistake in that respect and has declared something injurious which, according to common knowledge of every day life, is not injurious, then, I think the court will have to adhere to the provisions of the legislature.

"Undoubtedly it is within the province of the legislature, according to the decisions, where there is any doubt about the injurious effect of a product, to determine if it is injurious, and prohibits its use. Whether the act in a case of that kind would be subject to question has been passed upon by the United States Supreme Court, and several of the state courts, not including our court, however. They seem to hold that where there is doubt about the injurious character of the product, the legislature, in its province, may determine for itself, as a matter of law, if it is injurious: and Justice Harlan held in a case of that kind that it was not a matter for the court to determine, whether the legislature had exercised good public policy or bad public policy, but that the legislature had a right in such cases to declare the product injurious and prohibit it.

"That being so, I shall hold that the provision of the act declaring boric acid injurious is a valid provision, and together with the stipulation of facts, avoid the necessity of submitting any proof.

"There is some question raised with reference to the propriety of construing Clause 5 of Section 8, with Section 22. I have given this careful consideration and without further detail I will say to counsel that the two sections are intended by the legislature to be construed and applied together and to supplement each other.

"The finding will be for the People."

Virginia Officials Lose Feed Case.

In a decision handed down in the United States District Court for the Eastern District of Virginia, an interlocutory injunction was granted upon the complaint of the American Milling Company against those officials of Virginia having control of stock feeds. By the terms of the injunction, the officials are prevented from "instituting, or causing to be instituted, any suits, or other legal proceedings, against the said complainant, its agents or employes, or against any importer or original consignee in the state of Virginia, of any of said commercial feeds of complainant, so long as said commercial feeds remain in the original unbroken packages, or against the purchaser from any such importer or original consignee—under, or because, or on account, of anything contained in the above quoted provision of the said Virginia statute; from threatening to institute any such suits or proceedings, as aforesaid, and from seizing, or in any way interfering with, any of said commercial feeds, so long as the said feeds belong to the complainant, or to any such importer or original consignee, as aforesaid, and remain in the original unbroken packages so long as said feeds belong to the first purchaser from any such importer or original consignee, and are not by him offered for sale; from sending out any circulars, or in any manner spreading injurious reports concerning said commercial feeds of complainant, or any of them, or claiming or intimating that the same do not comply with the laws of the state of Virginia; from doing any act, or taking any step, under, or because, or on account, of the above quoted provisions of said Virginia statute, so far as the same may

affect the said complainant, or its said feeds; from treating as cancelled, revoked or suspended, the certificates of registration issued to said complainant under date of January 2, 1912, a copy of which is made an exhibit with said bill of complaint; and from doing any act, or taking any step, based upon the claim that the said commercial feeds of complainant are not duly and legally registered in said state of Virginia for the year 1912, and from doing any act, of taking any step, inconsistent with the aforesaid certificate of registration, and from hereafter revoking, cancelling or suspending the said certificate of registration."

Commenting on this decision, *Flour and Feed* of Milwaukee says: "This case disposes of the last obstacle in the way of sensible and honest regulation of the feedstuffs industry. During the past few years every unsound proposition has been gradually disposed of by courts of competent jurisdiction so that now the way is absolutely clear to uniform and comprehensive legislation. The point decided in the present case was the father of all ridiculous provisions that were devised by impractical men to regulate a business they knew nothing about and should have been the first disposed of, but inasmuch as the attack on obnoxious feed laws necessarily took the lines governed by individual interest it is not to be wondered at that the movement against them should have been somewhat haphazard and did not take up the various features of importance in their proper order.

"About the first proposition attacked was the license fees. This was only natural, as this provision hit a great many innocent parties who were not very important factors in the feedstuffs industry, but who felt the injustice of being singled out to pay tribute to a crowd of self-interested office-holders to maintain them in fat jobs. The license fee proposition, though the least important of all of the features, was the first to be questioned in court and all remember, of course, the decision of Judge Pollock of Kansas, declaring the license tax unconstitutional.

"The case brought by the M. C. Peters Mill Co., Omaha, Neb., against the officials of Mississippi attacking the constitutionality of the law of that state, decided the question of standards. The points were so clear and the relationship of the constitution of the United States to the proposition in controversy was so well defined that the state accepted the decision without question and immediately set about repairing its law.

"The proceedings brought by the federal government against the Corno Mills Co., of St. Louis, firmly established the proposition that names and descriptions for products of all kinds are made and determined by trade usage and custom and are not subject to the whim or fancy of government officials. The very clear-cut opinion of Judge Jones in this case ably sets forth the rights in interstate commerce guaranteed by the constitution to feed products as well as all others."

Duties of Three Secretaries Defined.

Under date of July 8, Attorney General George W. Wickersham addresses the following letter to the Secretaries of Agriculture, of the Treasury, and of Commerce and Labor, defining the duties of the three secretaries with respect to the promulgation of food inspection decisions:

"I beg to acknowledge the receipt of your letter of the 14th of May, propounding certain questions which have arisen in the enforcement of the food and drugs act of June 30, 1906.

"You state that the Referee Board of Consulting Scientific Experts of the Department of Agriculture has lately completed an investigation on the use in foods of copper salts, the results of which investigation show that foods containing copper salts are adulterated under the food and drugs act, and articles greened with copper salts must therefore be refused entry into the United States and excluded from interstate commerce."

"You then state that doubts have arisen whether the announcement of the conclusions of the board shall be made by the three Secretaries in conformity with the practice which has existed heretofore, or by the Secretary of Agriculture alone, and I am specifically asked:

"1. Are the three Secretaries restricted to the making of rules and regulations, or have they any authority to review findings of fact and reports made to the Secretary of Agriculture?

"2. If the findings of fact and reports have been approved, should the three Secretaries participate in the announcement, or does the law contemplate that the announcement shall be made by the Secretary of Agriculture alone?

"Section 3 of the food and drugs act provides that the three Secretaries shall make uniform rules and regulations for carrying out the provisions of this act.

"Under the provisions of Section 4, the examination of specimens of foods and drugs collected under the rules made by the three Secretaries is to be made in the Bureau of Chemistry of the Department of Agriculture or under the direction and supervision of that bureau; if such examination shows a violation of the law, a hearing is given to the party from whom the sample was obtained. Regulation 5 provides that this hearing may be had before the Secretary of Agriculture, or such other official connected with the food and drug inspection service as may be commissioned by him for that purpose. In practice I understand the hearing is had before the Board of Food and Drug Inspection in Washington, or such officer of the Bureau of Chemistry throughout the country as may be most convenient in each case.

"Under the provisions of Sections 4 and 5 of the act, when it is made to appear on such hearing that the law has been violated, the papers are to be certified by the Secretary of Agriculture to the proper officer of this department for prosecution.

"By Section 11, in the case of imports the Secretary of the Treasury is to deliver samples to the Secretary of Agriculture, upon the latter's request, and opportunity for a hearing before the Secretary of Agriculture is to be accorded to the owner or consignee. If it appears from such examination that such articles are adulterated or misbranded, then they are refused admission into this country.

"It clearly appears from this brief statement that the direct and active enforcement of the statute is cast upon the Department of Agriculture and upon that department alone. The sole duty of the three Secretaries in connection with the law is the making of rules and regulations for carrying out its provisions.

"With this understanding of the law, I think the answer to your questions is plain.

"The Referee Board was established by the Secretary of Agriculture and is a board of his department. By letter to me of March 23, 1909, the Secretary stated that the members of the board are charged with the duty of considering and reporting to him upon the wholesomeness or the deleterious character of such foods, or articles used in foods, as might be referred to them, their sole function being to investigate and report.

"This board has, at the direction of the Secretary of Agriculture, investigated the effect of copper salts as a preservative of foods and has reported that copper salts are an added deleterious ingredient, which may render injurious to health the articles to which added.

"I understand that in similar investigations made by this board the report has been submitted to the three Secretaries, and, if approved by them, a rule has been promulgated to the effect that the preservative investigated will, or will not, constitute an adulteration, as the case may be.

"I take it that such rules have been made under a misapprehension of the true meaning of the statute. I understand that the finding of the Referee Board is not conclusive upon the courts should the question of the correctness of such finding properly arise in a case. On the contrary, I understand that the report of the Referee Board is no more than the statement of the board in each case that, in the opinion of the eminent chemists composing it, the use of the preservative in question is, or is not, deleterious to the human system.

"This report is not binding upon the Secretary of Agriculture, but is simply for his information and guidance. Should he approve the finding of the board, and so announce to the public, I understand that this announcement is merely a statement that in the subsequent examinations of samples of foods collected under the food and drugs act the decision thus made will be followed. To take the present case as an illustration, it is a statement to the public that the Department of Agriculture regards the addition of copper salts to articles of food as an adulteration and will report all such cases to this department for prosecution.

"I am, therefore, of the opinion that the three Secretaries are restricted to the making of rules and regulations and have no authority to review findings of fact and reports made to the Secretary of Agriculture."

British Net Weight Decisions.

Two test cases have recently come before English courts where on appeal parties convicted of selling articles where the net weights of contents was not stated, had the decision of the lower courts reversed and the conviction set aside.

As packet tea and print butter are extensively sold in this country, some with weight guaranteed and others without, being placed with consumers priced at so much per print or packet, these cases in view of pending legislation deserve careful scrutiny.

Two of the test cases related to the sale of paper with tea and came before the Justiciary Court at Edinburgh on the defendants' appeal against their conviction at Dunfermline. In one case the packet had on the outer cover the words: "Full weight of tea, including wrapper," and in the other the words: "This packet is guaranteed full weight." The Appeal Court unanimously upheld the appeal and quashed the convictions. In his judgment, Lord Salvesen said he thought that where a practice had long been established of selling tea in packets, and there was a notice upon the packets that the weight of the wrapper was included in the weight, the shopman was entitled to assume that the customer who asked for half a pound of tea was aware that he was not getting a full half pound of tea, but only half a pound of tea less the weight of the paper wrapper. It was questionable whether the public required any further protection than they, at present had, for, providing that the notice on the packet was sufficient, they were informed exactly what they are getting.

The third case involved the legality of the sale of butter in "prints" and came before the Appeal Court at Edinburgh in an appeal by Galbraith's Stores, Limited, against a conviction and fine of £5 for having sold a print of fresh butter "represented to weigh four ounces imperial weight" which was found to be less than that weight. The butter was wrapped in a paper which bore the printed words: "This article is not sold by weight," and the question arose whether the court below was right in holding that the appellants represented the weight of the butter thus sold to be a quarter of a pound as no verbal intimation of the notice on the wrapper was given by the shop lad to the purchaser. The Court of Appeal unanimously upheld the appeal and reversed the decision of the court below. Lord Salvesen saying he was clearly of opinion that the appellants took reasonable means to secure that the customer should be apprised that they were not selling fresh butter by weight.

Will Test Minnesota Ice Cream Standard Law.

Final preparations to test the constitutionality of the Minnesota law which requires all ice cream offered for sale to contain at least 12 per cent butter fat were made in Municipal Judge W. C. Leary's court in Minneapolis on August 1st when Assistant City Attorney John O'Donnell, by agreement with Sol Fligelman, attorney for the ice cream manufacturers, dismissed all ice cream cases, save that against George Boosalis, picked by both sides as typical for the purpose of a test. Fligelman said the ice cream men would carry the fight clear to the United States Supreme Court if necessary. The manufacturers contend that the law is invalid because the legislature placed an arbitrary minimum for butter fat content without inserting in the act any reason for so doing.

Denatured Alcohol Not to Be Used in Food Preparation.

Commissioner of Internal Revenue Cabell has prohibited the use of denatured alcohol in shellac intended for use as a glaze for confectionery. This ruling was made in a letter to a manufacturer in New York City. The letter says:

"Inasmuch as the Board of Food and Drug Inspection has prohibited, in food inspection decision No. 119, the use of wood alcohol as a solvent for shellac to be used as a glaze, this office must hold that specially denatured alcohol or completely denatured alcohol cannot be used as a solvent for shellac when the same is to be used in the preparation of any article of food."

Georgia "Near-Beer" Bill Vetoed.

Governor Brown of Georgia has vetoed the Alexander-Tippins' bill, which prohibited the sale of "near-beer" and so limited the percentage of alcohol that many patent medicines would have been barred in Georgia. The Governor declared the measure too drastic and that if enforced the present prohibition law would be sufficient.

EUROPEAN BUYING AGENCY FOR CALIFORNIA FRUIT.

As a result of increasing shipments of dried fruits from California to Europe, a large German wholesale house has established an agency at San Jose, California. This firm bought several tons of dried fruit from the growers last year and found the results so satisfactory that it purchased a site in San Jose and is erecting a three-story warehouse for handling dried fruit.

Papers on Scientific and Other Subjects

THE BEST METHODS OF SECURING LEGISLATION.*

By R. M. Allen.

The enactment of laws that are practical, efficient in detail, and comprehensive and fair is one of the problems with respect to regulation, whether it be of pure food or other matters. The other problem is that of intelligent administration. The members of this Association are primarily charged with and interested in the administration of pure food laws. Their work, however, shows best the need of additions to the laws and the appropriation necessary to put them into effect. It is logical and right that the legislatures should have the recommendations of the administrators of these laws, together with suggestions as to the practical trade details and knowledge of the true rights of the interests to be affected.

In some states there is abundant law on the statutes for present work, but little appropriation to put it into effect. In other states, the work has broadened out into many fields, and laws more in detail, as for example, with respect to the control of cold storage and sanitary matters generally, are required in connection with more appropriation.

If the administrator of the law is to carry weight in securing additional laws, or in helping to shape legislation under consideration, the best basis is the confidence of the general public, the confidence of the legislature that the subject has been given a full investigation of all the facts, and the confidence of the trade that the recommendations are wise and just.

Legislation comes from three sources: (1) From the storm of a thoroughly aroused public sentiment, as against the opposing influence of interests to be affected, and frequently in such instances proper arrangement of the law with respect to practical details is overlooked. (2) From the influence of interests to be affected by a law, frequently without due regard for the rights of the public, and also without that detail necessary to put the law into active operation. (3) From an honest attempt on the part of those who represent the best interests of the public and of the trade to construct a law based upon the widest possible investigation of both the scientific and practical facts involved, and so drawn as to operate with equal protection to the rights of all concerned. If the matter is of important public concern, it is always possible for both the general public and the trade to secure the best and most permanent results upon this last basis.

The National pure food law, although welcomed by a majority but partly inactive portion of the American food and drug interests, was swept into the Federal statutes as a result of a thoroughly aroused public sentiment. The first establishment of reform must be brought about in this way. It is true, that wise leaders in the House and Senate had been shaping an excellent National law during committee hearings and conferences, but the final passage of the law was brought about by arraying American public sentiment behind the bill supported by Hepburn, Richardson and Mann in the House, and by McCumber and Heyburn in the Senate; the people wanting pure food, but with little knowledge or concern as to the details of the two bills. Leaders in whom the public had confidence stood sponsor for the measures, and, for the most part, the leaders of public sentiment in that legislative fight stood arrayed against certain interests that were vitally opposed to the scope, plan and provisions of the proposed law. Public sentiment won, but in one or two instances the provisions of the law were compromised into a work for the courts, under which both sides claimed the advantage, and which have resulted in much expensive administration, litigation, and uncertainty with respect to the products affected. There were questions left to the administration and the courts, which should have been settled in the law itself, and which will be so settled as a new basis of confidence and constructive legislative effort is established from time to time.

Legislative conditions are entirely different in each of the states. A method that would succeed in Wisconsin, for example, would not succeed in New York, or a method which would succeed in North Dakota might probably not succeed in Kentucky. There are different influences, different interests, different conditions to be dealt with. The administrators

of the Louisiana law would not find much difficulty in prohibiting the artificial coloring of butter. The Wisconsin officials would not find much difficulty in prohibiting the bleaching of molasses. The meat problem would not be so acute in Tennessee as it is in Illinois, nor the fish packing problem so difficult to deal with in Nebraska as it would be in Massachusetts or Maine. Again, one official not acquainted with all the facts might be persuaded into inactivity by what the trade may seek as against its own best interest, or by what seems to be a strong opposition, but is in reality but a small minority of these putting out a particular product.

As to State legislation, I am, of course, most familiar with Kentucky. The present Kentucky food and drugs act, though general in many provisions, is, in many ways, one of the best of the State pure food laws. It was the direct outcome of a successful effort to collaborate the best in what the public needs and the rights and experiences of what the trade had to contribute. The first Kentucky pure food law was enacted in 1898, and, as in most States, had for its support the dairy-men who wanted to see the sale of oleomargarine as butter prohibited. Under that act, Dr. Scovell and his staff accumulated an excellent amount of data as to adulteration, and produced one of the first American reports giving the analysis of adulterated foods by name and brand. These facts were instrumental in securing the broader act of 1900, and the raising of the appropriation from \$2,500 to \$7,500 annually. The act of 1900 was amended in 1904 with the addition of \$3,000 more annually to the appropriation, secured especially in the Senate by an exhibit of food adulterations. After the passage of the Federal food and drugs act of 1906, it was plain that the Kentucky act was not complete, as it did not apply to drugs or liquors, and that the appropriation was wholly insufficient for carrying even the lines of work embraced in the old act into effect. The physicians and pharmacists of Kentucky, as well as the general public, were interested in amending the law so as to apply to the purity and labeling of drugs and medicines. There were two bodies with which to lodge the enforcement of pure drug law, the State Board of Health and the State Board of Pharmacy. The State Pharmaceutical Association had appointed a committee to draft such a law, lodging the enforcement in the hands of the State Board of Pharmacy. The Kentucky Medical Association were proposing a law, lodging the enforcement with the State Board of Health. Drug inspection was not a work which the Experiment Station was seeking, while the problems concerning the manufacture and sale of food dovetails closely into the problems of their production, and are, therefore, matters with which the Station was well prepared to deal. The subject of drugs was a new field which would have to be entered and studied in order to deal intelligently with any legislation applying thereto. The Kentucky Pharmaceutical Association, through their Secretary and legislative committee, finally proposed that the administration of the law be put in neutral hands, and we worked out an outline of administration, whereby drug regulations under the act would be adopted by a representative from the Kentucky Medical Association, a representative from the Kentucky Pharmaceutical Association, and the director of the station. With this plan established, we had the active support of the committee of pharmacists in perfecting the details of the law with respect to the adulteration and misbranding of drugs, and the active support of practically every Kentucky pharmacist in presenting it to the House and Senate. In the same way, our Kentucky food manufacturers were interested in some of the administrative provisions of the old act, and in establishing such additional authority and appropriation as would enable us to do more constructive work. The manufacturers appointed a committee to confer with us, and, with the representatives of the pharmacists and the Kentucky Federation of Women's Clubs, we met in conference and established first a confidence in each other's motives. Finally, every member of the conference started out to work towards a perfection of the details of the law, drawing upon their varied experiences, but contributing to the conference as citizens. This basis being established, we found that the representatives of the manufacturers were urging that the appropriation be raised from \$10,500 to \$60,000, but, knowing the sentiment of the Legislature with respect to appropriations, it was finally recommended that the annual appropriation be raised from \$10,500 to \$30,000, and

*Read at the Seattle Convention of the American Association of Dairy, Food and Drug Officials.

this recommendation was offered to the committees of the House and Senate with practically the unanimous endorsement of all. We had secured the passage of previous bills with a scant majority in the House. The act of 1908 was passed in the House with only one vote against it, and that member gave as his reason that he believed it impossible for any pure food bill to have such a unanimous endorsement and be of any good. The bill met almost an equal unanimous support in the Senate. There was an opposition from one or two interests, who, if the bill had not been drafted as it was, would probably have organized a strong opposition. The Senator whose constituents had raised the objection was gone to at once. It was explained as to what care had been exercised in drafting the provisions of the bill. We went to Louisville and had the constituent meet the conference committee. This opposition had come from the confectioners. We had a representative of the National Confectioners' Association meet the members of the conference committee in Lexington, and the result was no change, the withdrawal of the trade opposition, and the passage of the bill through the Senate, up to Governor Wilson's approval.

Paragraph 6 of Section 4 of the act not only prohibits the sale of a spoiled or contaminated product, but also the sale of any product that has been exposed in the preparation and sale to conditions that might render it contaminated. In other words, the law not only prohibits the sale of the infected article, but also establishes a quarantine against any article that has been exposed to any danger of infection. In order to carry this provision of the act into effect with respect to bakeries and slaughter houses, it was necessary to draft regulations; that is, to point out in specific detail just what practice would be regarded as liable to contaminate the food, and, at the same time, pointing out just what would be necessary to correct defective details in equipment and method in the bakery or the slaughter house. A very comprehensive bakery act had been offered in 1908 which had been drawn by a young, progressive baker in Louisville. This bill is said to have been generally opposed by the bakers throughout Kentucky, and was not passed. Our first work under the act of 1908 was an investigation of the sanitary equipment and method in the bake-shops throughout Kentucky. With this before us, we set out to find what had been the experience and the remedy in Chicago, New York and other cities and states throughout America and the countries of Europe. The bakers of Louisville had an association. We asked this association to appoint a committee, and they chose ten of their best members to act with us in the drafting of bakery regulations under the act. We went over the facts with this committee, over the collected ordinances and laws referring to bakeries. Then, we set to work to draft such regulations as would be within the scope of the Kentucky law, and to add such other items as would help the baker improve equipment and methods. Just as soon as a basis of confidence was established between this committee and ourselves, they, too, joined into the conference with their wealth of experience as bakers, and thorough knowledge of details, until we began to regard these ten men not as partisan bakers, but as citizens contributing a wealth of bakery experience. After the regulations were established, we appointed a master baker to assist in putting them into effect, and the clean-up, not only of all unsanitary conditions, but of all questionable materials, has been beyond anything that we had hoped for, and we are now having the active support of most of the eighteen or twenty bakers that it was finally necessary to prosecute, in maintaining better sanitary conditions and in weeding out questionable materials.

The local slaughter-house problem in Kentucky is as acute as it is in other states, and little has been done with it so far, except to investigate the facts and cause some temporary clean-up in each plant. The remedy for this problem is the municipal abattoir. This is the only remedy. This plan is necessary in order to establish a profitable means for saving the offal and in order to make the inspection of the animals practical by concentrating them into one place. We have no powers, under the present Kentucky food and drugs act, to require the establishment of municipal abattoirs. We drafted a set of regulations for the sanitary condition of slaughter houses, however, under the act, as comprehensive and strict in detail as possible. This draft was submitted to a committee of the Louisville Protective Butchers' Association, after the same plan as was pursued with the bakers, and we have the letter of their president endorsing the regulations submitted, without change, this endorsement being based upon a thorough investigation by their committee. These butchers, while very little has been done to-

wards the municipal abattoir movement, have concentrated into a fewer number of plants, and have appointed two butchers in their own employ to co-operate in putting the present law into effect.

And so on, illustrations could be enumerated in Kentucky, and in other states overwhelmingly establishing the proposition that it is possible to establish such basis for better pure food laws.

The justification for new laws are facts of practical concern to the public interest, and with which there is either no law to deal, or for which more efficient law must be substituted. The facts justifying, the next question is the wisest and most efficient law. Whether, therefore, it is sought to obtain legislation to cover cold storage, eggs, local slaughter houses, dairies, fruit and vegetable factories, retail markets, and so on, the first preparation is a full investigation of the facts to be dealt with, such as a thorough inspection of such places in which foods are prepared and offered for sale, an examination of the materials used in the preparation of any substance, as well as the finished product. This gives the basis of fact and an array of facts with which the friends of the proposed legislation can convince opposition in the trade, legislative committees, and any opposition in the House and Senate, when the bill comes up for final action. If more appropriation is sought for a department, then facts showing that adulteration or misbranding exists in some particular field of the food industry, and as to just how much force is needed to enter upon a thorough investigation, and to enforce either existing laws or proposed new laws, should be at hand. The Food Commissioner or other official should be in a position to show that his department is being managed up to a good standard of business efficiency; that the man whom he has had working on the inspection of bakeries, for example, has so many bakeries to inspect; that there are so many samples of materials necessary to be taken; and that the time of this particular man is needed, and a considerable part of the time of one analyst needed to analyze the bakery samples taken. It is probably the case that the man who is inspecting bakeries is also inspecting slaughter houses, grocery stores, and so on, and the physical impossibility of doing such a wide range of work should, at once, appeal to the Legislature. The number of grocery stores in the state can be tabulated, and the exact amount of time and money necessary to inspect these stores at least twice a year. In such tabulations it will probably be shown that the present force do not have time to go very far from the railroads, and that the foods of rural districts are not being watched as closely as the foods in towns lying within easy access of the train. This gives opportunity to show just how much inspection force is necessary in order to thoroughly inspect the grocery stores of the state.

In the same way, the kind of inspection necessary to control not only the watering and skimming of milk, but to hold it to a necessary sanitary standard, should be presented. Let us say, for example, that competent milk inspection consists of a thorough inspection of the dairy and taking samples of the water supply; a chemical examination of the milk as it is sold from the dairyman's wagon, from the milk depot, the retailer, or from the dairy lunch, hotel, restaurant, railroad station, and so on; a bacteriological examination of the milk as produced by the dairyman and as sold in the different departments of the trade, showing the number of bacteria, and such pathogenic bacteria as those of the *B. coli* group, which mean manure infection, streptococci and similar germs, which generally mean diseased udders; and the number of dairies in the state, including those in the rural districts, are totaled. The number of dairies that can be covered by an inspector in one day should be shown, along with the constructive or court work necessary to remedy conditions, and the number of chemists and bacteriologists and laboratory equipment needed to handle the samples. Along with these should be shown the results that such inspections have already established, and then it is up to the Legislature and the general public, thus put in touch with the facts, as to whether or not they want such inspection to continue. If the facts justify, the public are generally unanimous in demanding the inspection.

Laws regulating business throughout the United States have come to stay. The trade recognizes this and is demanding constructive effort. The milk from a large dairy or milk depot is found to contain a high count, and to contain bacteria of *B. coli* group. That official who goes no further than finding fault, and tells the dairyman in a harsh manner to clean up, will find it a difficult task to enforce existing laws, to secure additional appropriation or legislation, or to hold the laws already on the statute books. That

official, however, who is prepared himself, or has some member of the force who can start at the beginning of the dairyman's process, and with bacteriological examinations of samples taken from the pail, the cans, the cooler, and the bottler, show the dairyman where the fault lies, and how to correct the fault, while probably having always the opposition of a minority of the dairyman, will have the support of a large majority in maintaining and increasing such methods of inspection.

One official will examine a bottle of catsup, find it to contain a large number of molds and other bacteria, and condemn it as unfit for food, or will inspect a fruit or vegetable factory, and mark it as being unsanitary. Another official will welcome an opportunity to help the owners of the factory to make the changes necessary to comply with the sanitary requirements, and in doing so, if the official is in a position to give sound, practical advice, and to recommend such changes in equipment and methods of the plant as will produce results, that official has the support of that manufacturer and of other manufacturers in extending the law and its appropriation into a broader, fuller effect.

These sentiments may sound idealistic. They come as a result of some experience in these matters. It is true that there is a minority in all walks of life that will always be greedy and careless and ignorant, and against whom the laws must be continually enforced. But officials should not permit instances of this kind to warp their vision with respect to that larger part of the trade who welcome laws and their enforcement, when based upon intelligent investigation and full fairness to their rights.

Behind all of these laws the interest of the general public, of the intelligent public, must be at all times maintained. The public require that their departments shall be run in their interest, and not in the interest of the official who is administering the law. The general public are very jealous upon this point. Very frequently it is heard that so and so is grooming himself for Governor or for Congress, or for some other office, and whenever grounds are permitted for the prevalence of such impression, the motives of that official, whatever he may undertake, are questioned, and public support greatly lessened. The public will always support the official who will do a disagreeable duty, for example, and do it with intelligence and fairness. It may be that analyzing a box of Paris green or a can of paint, a bottle of linseed oil or turpentine, the contents of the stomach of a poisoned horse, and so on, is burdensome, but when such samples are sent for legitimate reasons from the citizens of the state, prompt assistance will be greatly appreciated by the parties and with excellent results in the way of public support. On the other hand, an efficient inspector who inspects a slaughter house without an honest attempt to deal with it properly, who inspects only a few of the groceries and dairies in a district, and so on, brings discredit to the department, and a lack of confidence on the part of consumers in that locality who want inspection with respect to a particular grocery, dairy, meat shop, or bakery from which they may be buying their food. It is all of such details that finally fix a department in the favor or disfavor of the public.

It is, of course, easy to secure and enforce laws with respect to grave abuses; but with respect to those more difficult matters of public concern, which need constructive effort to produce results, it is possible to establish a basis where there is no conflict between the rights of the trade and the rights of the public, to establish a basis where every requirement proposed can be made to pay profit, can be made to successfully compete in the markets, and with such a basis for legislation it will be possible to have the provisions of the law and the appropriation determined according to the needs of the work to be accomplished.

THE EFFECT OF THE ENVIRONMENT OF CARBONATED BEVERAGES ON BACTERIA.

By C. C. Young and N. P. Sherwood, Water Analysts, Kansas State Board of Health.

There is a tradition among bottlers of carbonated soft drinks, founded, as far as can be learned, on very little experimental data, that the conditions under which "soft" drinks are prepared are toxic to all bacteria.

The basis of this idea appears to be statements in the literature which state that carbon dioxide under pressure markedly reduces the number of bacteria in water, and that *B. typhosus* and *B. coli* show a reduction of 90 per cent in twenty-four hours when exposed to carbon dioxide under pressure. However, the experiments that were available were not carried

out under bottlers' conditions. The conception held by the majority of manufacturers is that so long as the water is clear and sufficiently soft to carbonate well, no thought need be given to its sanitary quality, as the carbon dioxide under pressure will kill any living organism.

It was the object of this investigation to find whether or not any pathogenic organism could withstand the unfavorable environment of the bottled carbonated beverages a sufficient length of time to reach the consumer.

Investigations of trade conditions showed that, with the possible exception of ginger ale, most of the "pops" put on the market are consumed within ten days from the time of bottling. In fact, during the summer months many instances were found where the goods go directly from under the bottling machine to the consumer.

The following experiments were carried out under trade conditions, with the one exception, however, that all conditions were intensified.

Pop bottles of 240 cc. capacity and ability to withstand twenty pounds pressure were used. All bottles except the ones to be inoculated with *B. typhosus* were washed in the usual manner; the latter were washed, boiled for thirty minutes, and cooled. Several sets of bottles giving different conditions of environment were inoculated. Three sets, of eight bottles each, were inoculated from forty-eight-hour broth cultures of *B. typhosus*, *B. coli communis* and *B. prodigiosus*, respectively, each bottle receiving 1 cc. of its respective culture. Syrup known as bottlers' lemon had been previously added. Four bottles from each of the three sets were then filled, in the usual manner, with carbonated water at eighteen pounds pressure, at 10° C., and capped. The remaining four bottles in each of the three sets were filled, in the usual manner, with uncarbonated water and capped.

In the fourth and fifth sets no organism was used for inoculation, syrup was added to one but not to the other, and both were filled with carbonated water and capped. A sample of the water used in bottling was also taken. Samples from each set were plated out in the university laboratories, 4, 28, 80 and 244 hours after the filling of the bottles. All bottles were kept at room temperatures, to correspond with normal conditions in trade. In plating, plain agar was used for *B. prodigiosus*, both plain and litmus-lactose for *B. coli*, and litmus-lactose agar for *B. typhosus*. Litmus-lactose agar was used to aid in identification of the last-named organisms. Plates of *B. prodigiosus* were incubated at room temperatures, and those of *B. coli* and *B. typhosus* at 37½°C. *B. prodigiosus* was identified by its characteristic red pigment. Presumptive and confirmatory tests were used for *B. coli*. Agglutination in the hanging drop and the Widal reaction were used in identifying *B. typhosus*. The mean results obtained are tabulated below:

TABLE I

Duration of Exposure Before Examination.	Carbonated Water Used—				
	With Syrup				Without Syrup
	<i>B. typhosus</i>	<i>B. coli</i>	<i>B. prodigiosus</i>	Not Inoculated	Not Inoculated
	No. per cc.	No. per cc.	No. per cc.	No. per cc.	No. per cc.
0 hours.....	200,000	950,000	850,000	300	20
4 hours.....	25,000	250,000	800,000	.....	.....
28 hours.....	9,000	20,000	250,000	.....	.....
80 hours.....	1,200	1,300	150,000	.....	.....
244 hours.....	110	900	5,000	150	0

TABLE II

Duration of Exposure Before Examination.	Uncarbonated Water Used—			
	With Syrup			Without Syrup
	<i>B. typhosus</i>	<i>B. coli</i>	<i>B. prodigiosus</i>	Not Inoculated
	No. per cc.	No. per cc.	No. per cc.	No. per cc.
0 hours.....	200,000	950,000	850,000	20
4 hours.....	200,000	950,000	850,000	.....
28 hours.....	50,000	.....	.....	.....
80 hours.....	6,000	100,000	.....	.....
244 hours.....	900	40,000	110,000	200

* Slipped.

From the above tables we may note the following facts and conclusions:

1. That the number of organisms outside of those introduced was extremely small.

2. That there was a decided reduction in number of the organisms introduced, owing to standing 224 hours uncarbonated.

3. That there was a very marked reduction in numbers of all three organisms introduced, and especially of *B. typhosus*, owing to conditions existing in the carbonated bottles.

4. That there was not a complete killing out of the organisms introduced, during the entire experiment.

5. That *B. prodigiosus* and *B. coli* seemed to be somewhat more hardy than *B. typhosus*.

Undoubtedly the longevity of *B. typhosus* depends in a great measure upon the virulence of the organism, and as the results above show that some of the organisms will live longer than the beverage is normally on the market, the manufacturer should not depend upon the percentage of reduction caused by the carbon dioxide and other substances.

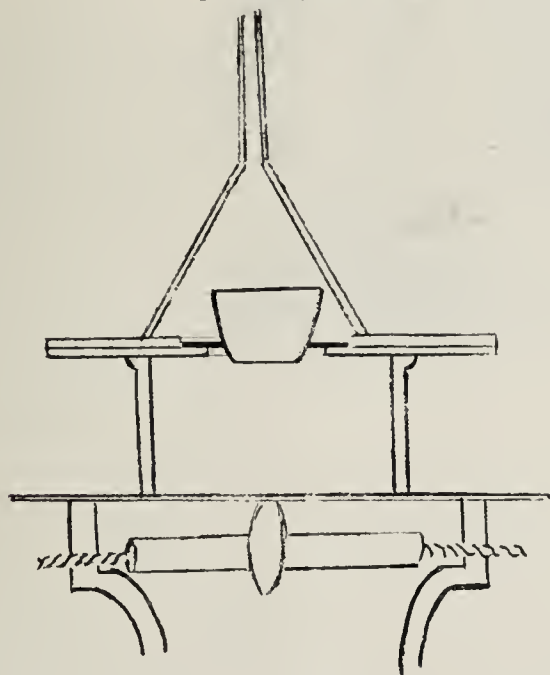
From the observation that the most hardy individuals can resist these adverse conditions for a considerable length of time, the logical conclusion is that no water should be used in the manufacture of a carbonated drink that is in the least suspicious, and if a doubtful water is the only source of supply, this should be subjected to treatment by some method of sterilization, with subsequent filtration through a trustworthy and efficient filter.

A SIMPLE APPARATUS FOR GRAVIMETRIC DETERMINATION OF BENZOIC ACID.*

By William Frear.

The several forms of apparatus prepared for the sublimation of benzoic acid from the ether or chloroform extract of foods, are usually rather complex, and expensive, if a number of units are required.

Some years ago the writer devised a very simple and inexpensive apparatus that serves very well for the purpose. The apparatus consists of a hot chamber, a retainer for the extracts, and a light sublimated head. The chamber is produced by use of the Chaddrek porcelain burner over the top of whose column is placed a thin sheet of asbestos paper supported by an ordinary pipe-clay triangle. Upon the paper is placed the detached fire-clay ring of the burner, and upon the ring is placed a heavier ($\frac{1}{4}$ to $\frac{1}{2}$ inch) flat ring of asbestos board with a central circular orifice large enough to receive the $2\frac{1}{8}$ inch copper ring of a water bath. The re-



ceiver is a one-inch porcelain crucible; the sublimation-head, a long-stemmed, 3-inch funnel, previously tarred. The funnel should, before it is weighed, have the upper end of the stem lightly plugged with absorbent cotton, or better, glass-wool.

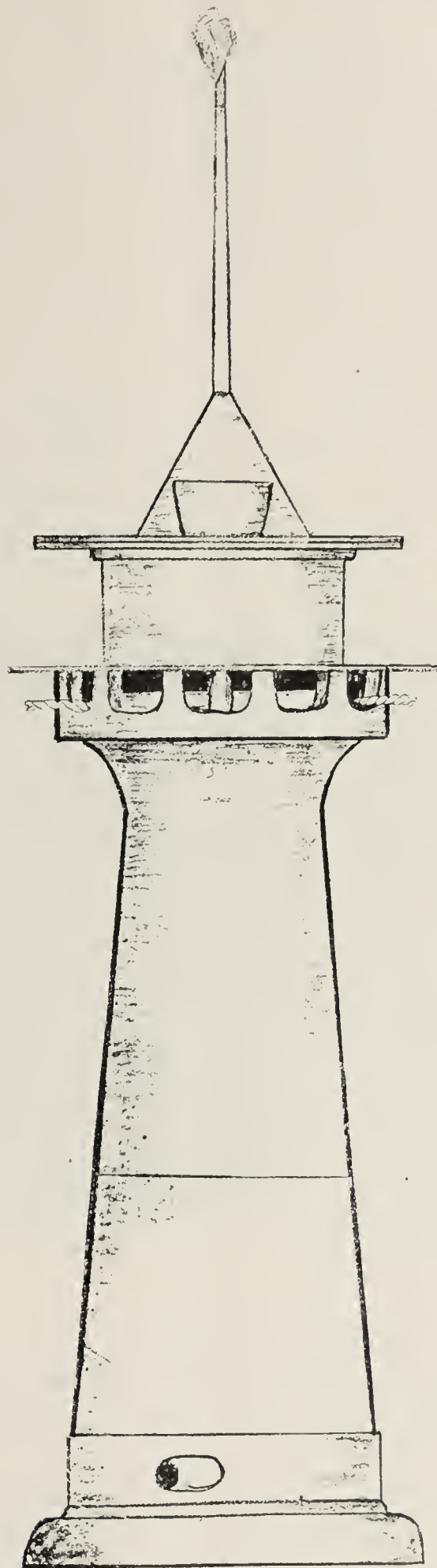
The heat of the chamber can readily be controlled. The sublimate forms principally on the upper half of the curve and lower portion of the stem of the funnel, through whose transparent walls the crystalline nature of the sublimate can readily be observed. The plug prevent a slight loss which occurs when the end of the stem is left open during the sublimation process, the funnel, owing to its shape and size, is readily weighed upon the ordinary balance pan.

A series of careful determinations made in this laboratory by W. T. Thomas, using this apparatus, upon pure ketchup

*Read at the Seattle Convention of the American Association of Dairy, Food and Drug Officials.

to which known quantities of benzoic acid had been added, gave results very slightly below theory, while direct titration gave results slightly above theory.

If it is desired to check the gravimetric determination by subsequent titration or test for cineramic acid, the sublimate



is readily washed from the funnel; on the other hand, the latter can readily be carried in a jar or carton, in case it is desired to use it as an exhibit in the presentation of evidence.

The consumption of ice cream increases proportionately faster than the population. According to the *Scientific American*, 55,000,000 gallons of the delicacy were disposed of in 1906 and 120,000,000 gallons—an average of five quarts apiece—in 1911. Every 100 gallons requires a ton and a half of ice and 800 pounds of salt. This is “a striking example of economic waste,” which, the *Scientific American* says, can be prevented by electrical refrigeration.

Household Science and the Table

OLIVES AND OLIVE OIL.

By Elenora E. Reber.

American housewives are more keenly alive today than ever before to the necessity of possessing knowledge concerning the methods of handling and processes of manufacture of foods and food products and are daily becoming better informed on matters of this character. In many cases information relative to the oldest and most common foods is least generally disseminated, however, and this fact is true in the case of olives and olive oil. There are few people who have even a meager idea of the care required and length of time it takes to cure the olive pickles which they eat with so great relish, or have any idea of how the oil is extracted from the fruit and made palatable.

There is no food or class of foods having more ancient lineage than olives and olive oil, for the olive tree has an authentic history dating back to Noah's time. Both sacred and profane history give prominence to this tree and its products, particularly the oil which was in ages gone so precious that it was used only by those of wealth and high estate. In fact, olive oil was at one time the only oil known, and it is famed in Grecian history as that with which heroes anointed themselves.

Pickled olives were found in the ruins of Pompeii, showing that the ancients knew also their relish and value. The olive tree was sacred to the goddess Athene and from time immemorial has been regarded as an emblem of fertility, wealth and peace.

In modern times Italy and Spain have held pre-eminence as the home of the olive, and in those countries oil and fruit have been for centuries and are today an indispensable portion of the regular daily diet of the natives, both rich and poor. The green olive alone is eaten, however, except in the case of the very poor classes, some of whom consume a dried ripe olive of inferior quality, and which is never exported, so Americans never see them.

On the western continent the only point where olives are grown on a commercial scale is California, and there may be seen at Sylmar in the San Fernando valley what is said to be the largest olive orchard in the world, comprising an area of about 2,000 acres.

Olive orchards seem always to be picturesquely located in the foothills, or on the bed of some well protected valley, and in May when the flower buds open and the trees are covered with small white blossoms the beauty of the orchard scene is greatly enhanced.

Harvesting of the fruit begins along the middle of September when the green fruit to be used for pickling is gathered, the largest specimens being picked first. Olive picking is in itself a fine art, and special care must be exercised when the fruit is intended for pickling purposes, for the process is so severe that even slight bruises renders the fruit unfit to be made into pickles. The olives are picked in baskets or buckets lined with burlap or heavy cloth, to prevent abrasions. When intended for oil manufacture the fruit is allowed to become thoroughly ripe on the trees, as at that stage it contains the maximum amount of oil.

A conspicuous feature of the modern olive oil factory is its

absolute cleanliness and its freedom from odors, for the oil is very susceptible to atmospheric conditions, absorbing odors very readily. Upon the arrival of the fruit at the factory it is first freed from dust, leaves or any other extraneous matter that may have become attached to it, fanning machines being used in the cleaning operation. The berries are sometimes dried by artificial heat before being put into the crushing mill, in order that a portion of the water contained in the fruit may evaporate. By raising the temperature of the drying room to from 110 to 130 degrees, forty-eight hours will usually suffice to dry the olives sufficiently. Crushing and pressing follow without delay, the fruit taken from the drier in the morning being ground the same day. The universal method of crushing the fruit is with a heavy stone or bronze metal rollers revolving in a circular depression in a bed of masonry into which the fruit is put. The immense weight of the rollers mashes the fruit to a pulp, the pit as well as the flesh of the olive being reduced.

This pulp is next placed in a powerful press in "cheeses" about three feet square and three inches thick, piled high, and the whole mass then subjected to hydraulic pressure. The first oil coming from the press is called "virgin oil" and results in the highest grade of salad oil. The pulp left from the first pressure is again subjected to a much higher pressure, being

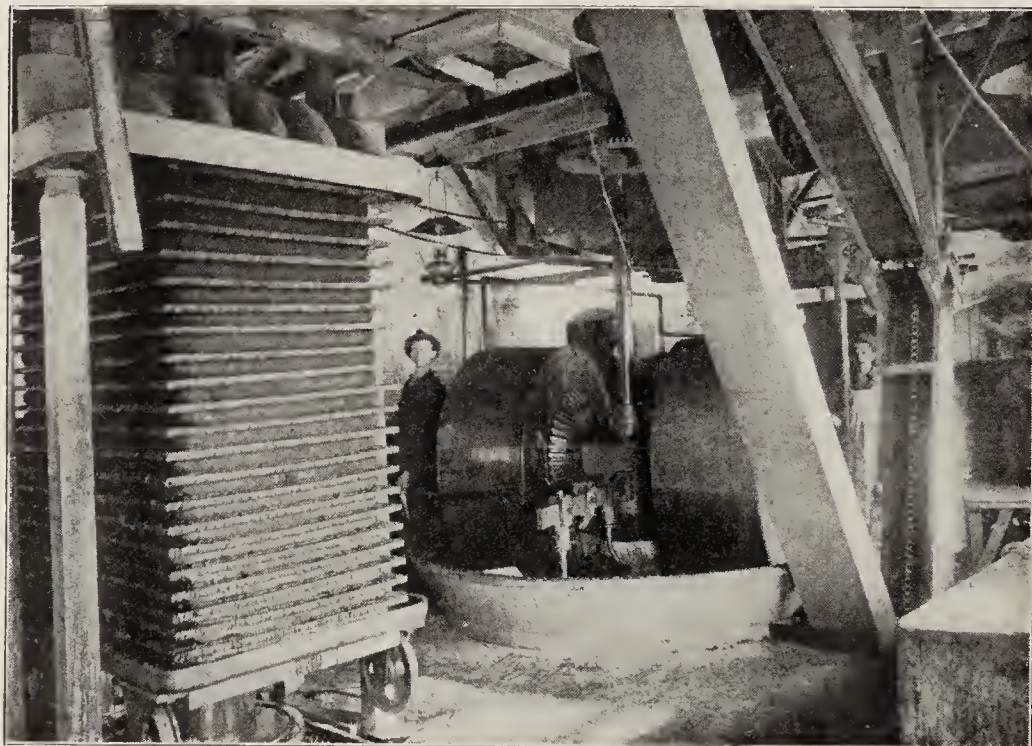
sometimes first treated with hot water to facilitate oil extraction, and a second grade of oil is the result. The first and second pressings are often mixed. A third pressing is made with still greater pressure and a low grade of oil is obtained, the product being used principally for lubricating or other mechanical purposes.

The fluid which comes from the press is set away in large glass lined tanks and left to stand until the oil separates from the foreign matter, when it is drawn off and filtered. It requires from sixty to ninety days for the oil to settle under treatment given in some

factories. Filtering is accomplished by means of an apparatus consisting of a large tank with a number of small perforated funnels attached. These funnels have a horizontal cross partition upon which cotton is placed and the oil filters slowly through the cotton, coming out perfectly clarified. Olive oil is handled in darkened rooms as much as possible, as continued bright light causes it to deteriorate rapidly. Pure olive oil improves with age and can be kept an indefinite length of time if placed in a dark place of even temperature.

The healthful and nutritive qualities of olive oil need not be dwelt upon, as they are well recognized and the taste for the oil in cookery is one that can be easily acquired and a more extensive use of it is to be urged.

The American people have not, until recent years, been very extensive consumers of olives and olive oil, the latter product having had an especially hard time gaining a foothold with us, except as an ingredient of salad dressing, and even for such use was not largely utilized. We have become very much better acquainted with the advantages of this pure vegetable oil of late, however, and it is more and more finding favor with progressive American housewives for cooking purposes requiring fat and shortening. When olive oil is used extensively in any household it should be purchased in large



CRUSHER AND PRESSER IN OLIVE OIL FACTORY.

cans, as it can be bought more reasonably in that way.

For frying purposes olive oil is not so expensive as one might at first think, and it is perfectly odorless if placed in a cold pan and heated just to the smoking hot stage. It makes a delicious substitute for butter or lard in food combinations, while the ease with which it can be worked reduces the preparation to a minimum.

For creamed soups stir two tablespoonfuls of olive oil with two tablespoonfuls of flour until perfectly smooth, and thin with one cup of cold milk. Bring to the boiling point seven cups of the desired soup basis, which may be either milk and fish, white meat or vegetable stock; season, add the olive oil paste and boil for five minutes.

A tomato bisque is made by smoothing to a paste three tablespoonfuls of olive oil with two tablespoonfuls of flour and adding to a quart of milk brought to the boiling point in a double boiler. Have two cupfuls of strained tomato juice, either fresh or canned, which has been seasoned with a bay-leaf, slice of onion, sprig of parsley, and three whole cloves. Just before serving add one teaspoonful of sugar and one-quarter teaspoonful of baking soda to the strained juice. Add to the thickened milk and at once remove from the fire.

One who is well versed in olive oil cookery offers the following hints on how to use this helpful product: "Roux as the foundation for either cream sauces or thickening can be made with olive oil in the proportion of one tablespoonful each of flour and oil to one cupful of milk or chicken or veal stock; if preferred a combination of milk and stock. This means cream sauce for eggs, fish or vegetables or as a binding for croquettes, cutlets, scalloped and au gratin dishes of the same articles.

"In salad dressings beyond the regular French and Mayonnaise preparations is a delicious slaw dressing—one egg well beaten, two tablespoonfuls of vinegar, two tablespoonfuls of water, one teaspoonful of sugar, one-half teaspoonful of mustard stirred together and cooked to the consistency of custard; then add four tablespoonfuls of olive oil and season with salt.

"As for pie crust, a thoroughly digestible one is possible in the proportion of five tablespoonfuls of oil to three cupfuls of flour, scant teaspoonful of salt and sufficient water to make

teaspoonful of baking powder and a pinch of salt. The recipe for corn bread is one egg, one tablespoonful of sugar, two tablespoonfuls of oil, two cupfuls of yellow corn meal, two teaspoonfuls of baking powder, one-half teaspoonful of salt and one cupful of milk.

"A reliable cake batter is made by mixing one cupful of sugar with three scant tablespoonfuls of oil. Beat thoroughly and add the yolks of two eggs. Then two cupfuls of flour, two teaspoonfuls of baking powder, one-half teaspoonful of salt, and one cupful of milk. After this has been thoroughly beaten cut in lightly the well beaten whites of the eggs."

OLIVE PICKLING PROCESS.

Olives designed for pickling, whether green or ripe, are first carefully graded by hand as to size and degree of ripeness, and strict attention must be exercised to see that no bruised or imperfect fruit is overlooked and allowed to pass



PICKING THE OLIVES.



SORTING OLIVES.

a paste of the proper consistency to roll. A rich brown color will be given the top crust by brushing it over with milk.

"For hot breads and cake, olive oil is a perfect shortening. Care should be taken, however, to beat it well into the flour, so as to produce a fine grained result. Biscuits are made in the proportion of one tablespoonful of oil, one cupful of flour, one

into the processing tanks, for bruised fruit will invariably "go to pieces" under the treatment. One of the arts of processing is the ability to have all of the olives come out of the brine of uniform color. This is accomplished by exercising proper precaution to have the lye-water in which the fruit to be pickled is first soaked, of exactly the right strength, and to see that the olives do not remain in the bath too long. The first bath is of about twenty-four hours' duration, at the end of which period the olives should be penetrated by the lye-water to a depth of about one-sixteenth of an inch.

From the lye bath the fruit is transferred to water tanks and subjected to numerous washings of clear water, several days being consumed in this part of the operation, as it is essential that every trace of the lye disappear from the fruit. Olives are of a very bitter acid taste in their natural condition, even when ripe, and the lye bath is given in order to extract this bitterness. The final treatment of the pickles is to transfer the olives to a twelve-ounce brine, barrel them up and roll away to storage for a period of six months, after which the last trace of bitterness should be absorbed. The foregoing process is employed in processing green fruit, and is mostly in use in foreign countries, whence our green pickles mostly come. Most of the California olives are pickled ripe,

or canned ripe and require a less strenuous treatment. The green olive is of comparatively little value as a food, containing little natural oil, and is consumed almost exclusively as a relish. On the other hand, the ripe pickled olive is very nutritious, containing a large percentage of oil, and is in every sense of the word a valuable food.

The processing of the ripe olives is done on the same principal as for green, except that the solutions are weaker, the fruit does not remain in them so long, and the whole operation is consequently much shorter.

The simplest way of keeping olives is to can them. They may be cooked with impunity, and are not injured at all in the process. Canned olives have been experimented with quite extensively in California at the experiment stations, and it has been demonstrated that they will keep several years without deterioration.

Pickled ripe olives constitute an extremely nutritious and digestive form of food. They contain a large amount of oil, carbohydrates and some nitrogenous matter, and with some foreign people replace meat to a certain extent. Following is a complete analysis of the ripe olive:

Water	30.00 per cent.
Protein	5.30 per cent.
Fat	51.90 per cent.
Carbohydrate	10.45 per cent.
Organic salts.....	2.35 per cent.

Experiments are being made in California with sun-dried olives also, and this method produces a product highly considered by many people. In the sun-dried olive the percentage of water is about 5 per cent and the percentages of protein and fat are correspondingly higher. Sun-dried olives eaten in combination with a few leaves of fresh, crisp lettuce, tomatoes or celery, we are told, make a most valuable food for the cure of diabetes, kidney and bladder diseases.

According to Otto Carque, food scientist, "sun-dried olives in conjunction with figs, make a palatable combination, containing all the elements of nutrition in a highly organized form. The nutritive properties are quickly assimilated by the system and transformed into healthy tissues. They are especially beneficial in cases of weak nerves or loss of flesh, as in the case of consumptives, as they rapidly enrich the blood and rebuild the devitalized tissues of the lungs. Sun-dried olives and figs will in time be more appreciated, because they are two of nature's most excellent medicinal foods. They restore and maintain health and promote longevity with the least taxation of the digestive organs."

It is claimed that most people must learn to really relish pickled olives and olive oil flavor. Those who have not yet educated their palate are told to eat three green pickled olives and they will evermore relish them. Few people find it necessary to undergo any training in the case of the ripe pickle. The relish of oil flavor in food is easily acquired, and in many native producing sections where the oil is less expensive than in the distant markets, olive oil has superseded other forms of cooking fat in countless homes.

The Punch Bowl—Past and Present.

The punch bowl has had a long and interesting history. This is especially true of the social life of English-speaking people, for the punch bowl first became an important feature in England early in the seventeenth century.

Just how the word or name originated is not definitely settled. Fryer, in his "Account of East India and Persia," published in 1697, says: "At Nerule is made the best arrack, or nepo de Goa, with which the English on this coast make that enervating liquor called 'Punch,' which is Hindostan for five ingredients."

A learned writer says that "the liquor called 'Punch' has become so truly English that it is often supposed to be indigenous in this country, though its name at least is Oriental. The Persian *punji* or Sanscrit *panchia*, i. e., five, is the etymon of its title." However, Richardson in his English dictionary says that punch is so called "perhaps from the pungency of its taste." Some old recipes of the time of good old Queen Anne give only four ingredients, namely, brandy, water, lemons and sugar, but usually the fifth ingredient was space.

Coming down to the present century we find many references to the punch bowl in story and song. Charles Dickens, in a number of his novels, brings in the bowl. Thus we see Sam Weller ladling out the contents of a punch bowl at that celebrated "swarry" and Mr. Micawber asking leave of Miss Trotwood to order materials for a bowl of punch.

Those who sang the praises of the punch bowl long ago were wont to allege that

"The needy soul

Finds boundless richness in the bowl,"

and we may all agree that, whether the owner be a "needy soul" or not, there is no doubt whatever about the "richness in the bowl!"

Poi—The Hawaiian Staff of Life.

What bread is to the American, poi is to the native Hawaiian. No meal is considered complete without it, and for the great majority of the natives of the islands it forms the principal article of diet. Poi is made from a tuberous root of the Taro plant, a species of the Caladium family, of which the well known elephant ear plant is also a member.

The tuber, which average in size that of a large sweet potato, is baked and afterwards pounded up with water until a smooth white paste is obtained, much resembling a wheat flour paste, except that the color is a pale pink or purple, dependent upon the variety of taro used. This paste is allowed to slightly ferment, or sour, when it is ready for use. In olden times each family prepared its own poi, the work being done by the men, as in fact were most other cooking operations. At the present time poi factories in which machinery grinds the taro and mixes it on a large scale have largely supplanted the old method.

Poi has a high food value and is eaten by many white residents of the Hawaiian Islands, but the taste for it has to be acquired. It is also eaten to some extent among the Chinese of this country, and if one is traveling on the Pacific coast, and makes the customary trip through Chinatown at San Francisco, the vegetable may be seen in the markets, and it is very probable that the prepared poi could be purchased in some of the chop suey houses there. The writer has eaten poi in that city, in a private home, made by one who formerly lived in the islands, though it was not prepared in quite the same way as here described, and found it rather insipid. Perhaps the natives' way is best, but when all is said and done there is no "staff of life" of any people that can compare with our own bread, and we are quite satisfied to allow the poi eaters of Hawaii a monopoly of their product.

Survey of the Food and Drug World

Chicago's Cold Storage Ordinance.

The Chicago City Council Committee on Judiciary has approved what is regarded as a most drastic ordinance governing cold storage warehouses and products taken from them. Its indorsement marks the end of a protracted investigation in which members of the Association of Commerce have played an important part. Some of the provisions are as follows:

All articles put in cold storage must be marked plainly with date of entrance.

No articles can remain in storage longer than ten months, except butter products, which may remain twelve months.

The health department is to inspect all warehouses at least every three months.

Each warehouse must make a report on the first day of January, May and September showing quantities of food in storage.

Jobbers will not be permitted to transfer articles from one warehouse to the other to evade the ordinance.

After articles have been taken out of warehouse for the purpose of sale they must not be returned.

All cold storage products offered for sale must be marked to show they have been in cold storage and date of entrance and release must be indicated plainly.

These regulations certainly appear stringent enough for the protection of the public, and with a vigorous enforcement of the provisions of the ordinance many of the offensive features of cold storage should be removed. Of course much depends

on the attitude of the courts towards offenders. A strict ordinance loosely enforced amounts to very little and commands no respect whatever.

Eighth International Congress of Applied Chemistry.

At the conclusion of the sessions of the Eighth International Congress of Applied Chemistry the delegates, including some six hundred of the most famous European scientists, will tour the United States, visiting all the important manufacturing centers and inspecting factories. There are two trips. The short trip runs from Monday, September 16 to October 22.

The inaugural session of the congress is to be held at Washington on September 4, and will be presided over by President Taft. The congress then adjourns to Columbia University, New York City, to meet Friday, September 6, and continuing to Friday, September 13. Elaborate preparations have been made for the entertainment of the visitors both in Washington and in New York. A lawn party on the White House grounds on the opening day is to be a feature. For the night of September 11 the management has practically brought out the New York Hippodrome for the evening performance. On September 12 there is to be a banquet at the Waldorf-Astoria, and on September 13 the congress will attend the ball game at the Polo Grounds between New York and St. Louis.

The sessions of the congress are to be reported mechanically by the dictagraph instead of by stenographers, the records being taken directly on phonographic cylinders. At the banquet the speakers will talk into a microphone, which will lead directly to a concealed megaphone at each of the many small tables, so that the sound will be produced distinctly in the very faces of the diners. A daily newspaper in the four official languages of the convention will be printed containing the journal of the previous day's proceedings.

Tolerance on Bread in Indiana.

An act of the Indiana Legislature fixing standard weights and measures, under Section 12, says: "A standard loaf of bread sold or offered for sale in this state shall weigh one pound and a standard loaf of bread need not be labeled with a statement of its weight. Whenever a loaf of bread sold or offered for sale weighs more or less than a pound it shall be labeled in plain, intelligible English words and figures with its correct weight, together with the name of the manufacturer."

After experiments on the shrinkage of bread conducted in the weights and measures laboratory of the state, the following tentative decision on tolerances is made: "One-half ounce for shrinkage on one pound loaf of bread not over fifteen hours from the oven. The tolerance on a loaf of bread weighing twelve ounces shall be three-eighths of an ounce on bread not over fifteen hours from the oven. On loaves of bread weighing less than one pound the tolerance shall be the corresponding fraction of the tolerance for the standard loaf of bread. If a loaf of bread sold or offered for sale weighs more or less than a pound, it shall be labeled in plain, intelligible English with its correct weight, together with the name of the manufacturer."

If further tests on the shrinkage of bread should clearly show that the tolerance is too much or too little, then the Department of Weights and Measures will revise its decision.

Surprising Figures in Packing Industry.

The demand of the country for meat products, as measured by statistics from the Chicago packing houses, fell off 25 per cent during June, as compared with that month of last year. Evidently some people have stopped eating meat. Total shipments of meat products from Chicago were 58,000,000 pounds less than for the same time a year ago, and the first six months of this year, as a whole, showed a considerable decrease. Export trade also is continually decreasing. The number of head of food live stock exported during the month showed a reduction of over 50 per cent in the annual comparison, and the figures for all meat products were 30 per cent less.

In contrast to these figures, it is shown that while receipts of live stock at Chicago showed a decrease for June as compared with last year's figures, the full six months shows an increase with the result that the marked falling off in consumption has produced much larger stocks on hand than were reported a year ago.

Results of New York Food Investigation.

The New York State Food Investigating Commission in its latest report considers the problem of how to eliminate the profits of wholesaling and of distribution to consumers. The report states that the cost of wholesaling, including profits, is

probably about ten per cent, and the total cost of retailing about thirty-three per cent, both of which are added to the first cost. It is believed by the members of the commission that markets of the food department store type could be operated with an addition to costs of products of not more than twenty per cent and that 200 such markets would be able to distribute food in Greater New York in a wholly economic and satisfactory manner. This suggestion is of general interest in view of the fact that there is no apparent reason why the plan would not work in smaller cities if it should prove successful in the metropolitan centers. An interesting statement in the report is to the effect that no particular class of dealers is making undue profit and that many small retailers are barely making wages. This should be remembered by householders who are inclined to place the blame for the high cost of living upon the grocer, the butcher and the baker.

Retail Druggists in National Convention.

The National Association of Retail Druggists is holding its sixteenth annual convention at the Auditorium in Milwaukee. The various affiliated bodies to be represented are: The American Pharmaceutical Association, National Wholesale Drug Association, Proprietary Association of America, National Association of Medicinal Products, Woman's Organization, N. A. R. D., and the National Association of Pharmacologists.

The present officers are: President, H. C. Schuptrine, Savannah, Georgia; First Vice-President, C. A. Cartmell, Wilmington, Delaware; Second Vice-President, E. A. Bernius, St. Louis, Missouri; Third Vice-President, S. A. Eckstein, Milwaukee; Secretary, Thomas H. Potts, Chicago; Treasurer, Harvey Leith, Providence, Rhode Island.

Regulation of Wood Alcohol in Japan.

Regulations have recently been issued by the Japanese government to control the sale of wood alcohol. The manufacture and sale of comestibles and beverages containing wood alcohol is absolutely forbidden, and the sale of any article containing such alcohol is illegal unless a label on the container clearly indicates the character of the contents. The manufacturers, importers, and dealers who handle wood alcohol in any form are required to keep a trade book and make entries concerning the amount manufactured, received, transferred, or sold, to whom sold, the object for which the purchaser bought the article, and the date of the sale. The books must be kept for ten years.

Shortage in Maine Sardine Crop.

The failure of the herring schools to visit the coast of Maine in their accustomed numbers this year has resulted in a shortage of the canning supply which threatens to send up the price of sardines for the year 1913.

The packers opened the season with only about one-fourth of their usual left-over supply and since the season opened on April 15 the outlook has not greatly improved. The schools have rapidly diminished in numbers until within the past few weeks only a few scattering ones have fallen prey to the fishermen.

The canners usually plan to close the season with a supply of 2,000,000 cases in stock, but this year, even with the 400,000 cases carried over there appears little prospect of securing the normal product.

Reasons for Reduced Beer Consumption.

Consumption of beer in Chicago through the fiscal year ending June 20th last fell off 35,000 barrels according to the report of the local branch of the Internal Revenue Department just made public. The decline has been noticeable for months, according to dealers, who attribute it to both the high cost of living and to the use of buttermilk as a substitute.

There was a decline also in the sale of internal revenue stamps for cigars, amounting to \$13,000. The sale of oleomargarine stamps increased \$22,210.20.

The total sales for stamps of all kinds amounted to \$12,087,300.52. There was a general deficit of \$544,755.30.

Must Wrap Bread in Bell County, Kentucky.

All ordinary loaf and bakers' bread offered for sale in Bell County, Kentucky, must be separately wrapped in clean paraffin paper specially prepared for that purpose. The county board of health of Bell County passed the resolution at a recent meeting pertaining to the sanitary method of offering bread for sale.

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CONDIMENTAL STOCK FOODS.

In the year 1907 the General Assembly of the State of Iowa enacted a law in relation to the sale of "concentrated commercial feedings stuffs." This term was defined to include nearly all commercial foods or feeds for animals and provision was made for the collection of "an inspection fee" of ten cents per ton, to be paid by means of a tag purchased from the State Food and Dairy Commissioner, which tag must be attached to the package or lot of feeding stuffs. This law intended that various packages of commercial feedings stuffs should pay in proportion to the weight of the feedings stuffs and tags have been issued for 25, 50, 100, 140 and 200 pounds each and for one ton. One exception to this method of payment of the inspection fee existed in the law, reading, "Every manufacturer, importer, dealer or agent for any condimental, patented, proprietary or trade-marked stock or poultry food, claimed to possess medicinal or nutritive properties or both, shall pay to the State Food and Dairy Commissioner, on or before the fifteenth day of July of each year, a license fee of one hundred dollars, in lieu of such inspection fee." The statute also required that the label of such condimental stock foods should bear a label showing among other things the "name and percentages of the diluent or diluents or bases, and the name and percentage of any deleterious or poisonous ingredient."

The Standard Stock Food Company of Omaha, Neb., immediately assailed the constitutionality of this law and sought to prevent, by Federal injunction against the executive of the law, its attempted enforcement. The law was challenged upon the general ground that it interfered with the interstate character of the business of the Standard Company, and that the complainant was therefore entitled to the protection of the Federal constitution. It was alleged in the complaint that the state had no right or authority to require (1) that the names and percentages of certain ingredients must be stated on the label; or (2) the exaction of the one-hundred-dollar inspection fee. The Federal District Court failed to agree with the complaining stock food company and the case was thereupon appealed to the United States Supreme Court, and June 10, 1912, an opinion by Mr. Justice Hughes fully sustains the law as a proper exercise of

the police power of the state, and not in conflict with the interstate commerce or other clause of the Federal constitution. The title of this case is *Standard Stock Food Company vs. H. R. Wright*.

In the same year 1907, the General Assembly of the State of Indiana enacted a law upon a similar subject, using the name "concentrated commercial feeding stuffs" and including in this term "condimental feeds, poultry feeds, stock feeds, patented, proprietary or trade-marked stock or poultry feeds." The requirements of this statute were in a general way like those of the Iowa statute, but a critical comparison of the two laws shows some real differences. The Indiana law requires the label to show "the ingredients from which the concentrated commercial feeding stuff is compounded."

The provision for the collection of the inspection fee reads, "For each one hundred pounds or fraction thereof, the person, company, corporation or agent shall affix a stamp purchased from the State Chemist." These stamps were to be sold at the uniform price of one dollar per hundred, so that whatever the size of the package, no matter how small, the inspection fee amounted to one cent per package, and no distinction as to size appears.

An amendment in 1909 provides for a minimum package of twenty-five pounds, but the principle remains the same, that the fee for any package less than twenty-five pounds is the same as for the minimum stated in the amendment.

This statute was immediately attacked, by means of an injunction asked of the Federal courts, and in the case of *M. W. Savage vs. William J. Jones*, State Chemist of Indiana, the United States Supreme Court on June 7, 1912, by Mr. Justice Hughes, the validity of the Indiana statute is fully sustained.

These two cases are important, not so much because they point out any new possible authority of the states, but because they apply to a new subject, namely, condimental stock foods, a subject that has been heretofore omitted from state laws, and which during the last five or ten years has occupied the minds of various officials.

In the Indiana case and the Iowa case as well the court very plainly points out that the state has ample authority to enact and enforce in good faith an inspection law and to charge a fee for the expense of such inspection. "The state cannot, under cover of exerting its police powers, undertake what amounts essentially to a regulation of interstate commerce, or impose a direct burden upon that commerce. But when the local police regulation has real relation to the suitable protection of the people of the state, and is reasonable in its requirements, it is not invalid because it may incidentally affect interstate commerce." The court quotes with approval from numerous decisions affecting the inspection of fertilizers under various state laws and the exaction of an inspection fee, and in both these cases suggests that no showing is made that the charge for the inspection is out of proportion to the necessary and inevitable expense of such inspection. In the Iowa case the court says, "The payment of the sum of one hundred dollars in the case of 'condimental, patented, proprietary or trade-marked stock or poultry foods' was required in lieu of the inspection fee of ten cents a ton, and was in effect a commutation of that charge. If it be said that this provision discriminates against one doing a small business, still the appellant wholly fails to show that it is thereby injured and thus entitled to complain."

The principal complaint in each of these cases was in regard to the provision requiring the statement on the label of some or all the ingredients of the mixtures sold as a stock food. "The evident purpose of the statute is to prevent fraud and imposition in the sale of food for domestic animals, a matter of great importance to the people of the state. * * *

The practice of selling feedings stuffs under general descriptions gave opportunity for abuses which the legislature of Indiana determined to correct and to safeguard against deception it required the disclosure of the ingredients contained in the composition. The bill complains of the injury to manufacturers if they are forced to reveal their secret formulas and processes. We need not here express an opinion on this question in the breadth suggested, as the statute does not compel a disclosure of formulas or manner of combination. It does demand a statement of the ingredients * * * a requirement of obvious propriety in connection with the substances purveyed as feedings stuffs."

Referring to the Iowa statute which requires the names and percentages of certain ingredients: "It was competent for the state in the exercise of its power to prevent imposition upon the public, to require the disclosure to which objection is made. The provision is not an unreasonable one and the effect upon interstate commerce was incidental only."

The court also points out that there are no laws enacted by Congress upon the subject embraced in these two cases, and hence the laws of the states are not therefore in conflict with the national food law, as claimed by the complainants. A study of these two decisions will give great encouragement to those who are endeavoring to write competent legislation to regulate the sale of so-called condimental stock foods. While the court does not pretend to say whether either of the companies is making a product that is affected by the respective laws of Iowa and Indiana, it is quite evident that no importance was attached to the averments that the products in question were strictly medicinal. It is quite evident that if the label in Indiana states the names of all the ingredients and the label in Iowa states the names and percentages of the "filler," it will not be difficult to get some idea of the medicinal or tonic value of the product, a matter of information which the prospective buyer heretofore has derived only from the glowing advertisements of the prospective seller. The effect of these two decisions is quite plainly to mark the fact that the day when anybody can make a condimental stock food and sell it irrespective of its merits or value, by reason of being able to deceive the gullible public, is passing, and that the man or company who would now sell such a product must expect, not only not to misrepresent the product, but to affirmatively tell the truth about it on the label of the package.

If inspection fees may be charged for the sale of condimental stock foods, and for the ordinary foods for animals, and for the inspection of fertilizers, and of animals imported into the state, why does this not point a way for the suppression of other troublesome adulterations of foods? And if the names of the ingredients in such a product may be required, why may not states require that all mixtures and compounds bear a label showing the names of ingredients, or even possibly the percentages of them?

The use of the Federal courts in injunctions against food law executives has seldom been successful, but the attempts point out the fact that the manufacturers

who believe themselves aggrieved either by the action of food officials or by the nature of the statutes have not been unwilling to take the food commissioner into court to defend. That is, the manufacturer in a sense becomes the prosecutor of the commissioner. The force and effect of any law is determined only when it has passed under the scrutiny of the court of last resort and the example of the manufacturers who have attacked by injunction the laws of the state, is one that many a food commissioner, who seems to dread submitting his acts and his laws to the scrutiny of the court, might do well to follow and follow vigorously and persistently. The accused is entitled to two things, to a vigorous prosecution and to a decision by the courts, so plain as to mark the line of conduct both for the accused and for the prosecutor. While these stock food cases have been a long time on the road they have now arrived at the destination beyond which they may not go and the decisions of the court are of sufficient value to pay for all the expense and delay to which they have been subjected.

THE INGREDIENTS OF BEER.

Beer standards, and some reasons for rejecting those proposed by the Joint Committee on Standards of the Association of Official Agricultural Chemists and the Association of State and National Food and Dairy Departments in 1908, were discussed at some length in the AMERICAN FOOD JOURNAL of July 15, 1911. This discussion was purely academic and did not take into consideration a phase of the commercial situation involved, the dispute between the growers of barley, known as the American Society of Equity, and those who would introduce into American beer other grains and grain products.

Announcement is made in news telegrams that the question of the normal constituents of beer is to be taken up and determined by the Board of Food and Drug Inspection at some near date, and two members of the board are mentioned as having recently made pilgrimages to various breweries throughout the country in order to get "inside" information upon which to base such definition. The commercial question referred to, it seems to us, may be appropriately referred to now, and as evidence that it has in some measure reached the stage of general public discussion we can do no better than quote a recent editorial in the St. Louis *Post* on "Barley and Rice," which seems to touch the heart of the subject.

"There is a fight on in Congress between the barley farmers and the rice farmers," says the *Post*. "The former are trying to have a definition of beer established which will make it legal to label as beer only the product of barley, and the rice farmers oppose this. Dr. Wiley has defined beer to be a barley product, because beer originally was made of barley. But modern breweries, especially in this country, are using rice instead of barley very largely, especially for the light beers.

"There is no contention that the beer made of rice is any more harmful than that made of barley. It is merely a fight between two industries, where one seeks to promote its interests at the expense of the other through a pure technicality. Congress ought to prevent such action. It has lent itself to the butter industry as against oleomargarine, and that is going far enough—too far, in fact.

"Protection of the health of the people and prevention of fraud constitute the only purpose of government regulation. Neither purpose would be served in discriminating in favor of barley beer as against beer made of other cereals. If either the Department of Agriculture or the Agricultural Committee of the House seeks to have a definition of beer fixed along the narrow line indicated, a general protest should be made against such a palpable

attempt to promote one industry as against another under the guise of protection of the public health.

"Representative Anderson of Minnesota is the one most active in the matter. Barley is a Minnesota crop, while rice is grown in the southern states. The motive is too plain to be missed by anybody."

Beer made in America contains barley-malt universally. That barley should be the only grain used in beer is the contention of the barley growers, also universally. Let us restate some things that were said in these pages in July of last year in the discussion of beer standards.

"According to the reasoning of the late Solicitor-General Bowers in the whisky decision, which was approved by the President, the primary object of the food and drugs act is to assure the consumer that he shall get what he buys. The important consideration is not the chemical composition of the product but rather those qualities of taste, aroma, appearance and stability which, in the popular mind, are connected with the idea of beer."

"It is the universal experience of brewers who have tried the experiment, that all-malt beers are not relished by the public generally as much as beers made with adjuncts. The American taste is decidedly different from the European. In Bavaria where all-malt beers are prescribed by law—merely, however, for the protection of the domestic barley grower—the people look upon beer not merely as a beverage but to a considerable extent as a food. In the United States, however, beer is regarded and used as a beverage. The American does not drink beer because he is hungry, he drinks beer because he is thirsty and because he wants a relish that appeals to the taste and the smell. A similar tendency is observed in Europe. Beers of the Bohemian type, that is to say, pale in color and with less body, are becoming more popular even in Bavaria, and the brewers of England note an increasing drift of public taste toward lighter ales, lighter in body and in alcohol content."

"The American brewer finds that the pale, lighter bodied beers of the Bohemian type are really more difficult to produce than the heavier ones of the Bavarian type. By the employment of about 30 to 40 per cent of unmalted cereals in addition to barley malt, such as the various corn products and rice, he is able to reduce the large percentage of albumen which is contained in American barleys, while at the same time utilizing the ferment which that barley contains for the conversion of the starch supplied by the corn products or rice. If the tentative standards of the Committee were to prevail the American brewer would find himself placed in the dilemma of being obliged to put on the market a product for which he knows the public has no taste."

To restrict American beers to the all-malt type and require that beers made otherwise shall be called something else, or labeled "imitation," is not only evil—it is unprogressive and un-American. The Board of Food and Drug Inspection has a chance to do justice to all brewers by refusing to do an injustice to a majority of them.

MALTHUS WITH A NEW VIEWPOINT.

We reproduce with some trepidation the following editorial from *American Medicine*. Lest there be a fear that it represents our views we hasten to disclaim any intention of endorsing it *in toto* by printing it. It represents to a certain extent the fatalistic solution of the problem presented, namely, the high cost of

living, and is the only thing we have seen that goes into the problem in a really earnest search for fundamentals. Our readers may not agree with the writer wholly. We may protest against so ready an acceptance of the theory that our American age of gold is so evanescent, but if there are fallacies in the argument some one else must point them out. We hate to acknowledge it, but these words seem sound and true—but they are also depressing and pessimistic:

Overpopulation and cost of living are occupying the serious attention of Japanese statesmen who have apparently rediscovered the facts which worried Malthus over a century ago. Darwin proved that overproduction was normal and necessary if there is to be progress or evolution by selecting the fittest. There must be unemployed workmen for the factories to call on, to fill the vacancies which constantly occur and the same reasoning can be followed into all walks of life; but Malthus did not know this and was much concerned over the future when the usual checks to population—war, disease, etc.—would diminish so that there would be more people than food and the struggle for existence be terrible. As we have repeatedly shown, the process is the exact opposite and the stress of living is lessening in the world at large through a lessened birth rate and increased food production. There are now dense comfortably happy European populations fed from America—a condition beyond the wildest dreams of Malthusians, and moreover the improvement occurs without resort to any of their suggestions. A Japanese governmental commission is not aware of these natural phenomena, and has gone to the trouble of calculating that by the present rate of increase of population and food, there will be, in thirty years or so, some twenty or thirty millions of Japanese without food. They have not shown how so many people can grow up without food—but that's a mere detail. The evident purpose is to show the alleged necessity for expansion of territory to grow more food like the United States, or expansion of trade so as to import food like all of northwestern Europe. Will they fight for territory and trade to raise the surplus babies, or let occasional famines keep a proper balance?

The Chinese prefer famine and plagues to war if we can believe a writer in the *Journal of the American Medical Association* (May 27, 1911), for he states that the belief is universal that they are real blessings in reducing overpopulation so as to make it easy to obtain food where formerly the struggle for mere subsistence was dreadful. Their hatred of war is well known, and they never migrate for a home but merely to make money so that they can return to live in comfort. With oriental fatalism they prefer plagues and famines—that is, the survivors do after the damage is done to others. A reduction of the birth rate is almost blasphemy in a land of ancestor worship, and the Japanese consider it a sacred duty to produce soldiers for the Mikado, so both peoples wax; but are they to grow strong without food? Will the advocates of peace be able to prevent them fighting for any food in sight? Starving men do not arbitrate, when they can take with none to hinder. At the present time there is a rice shortage which threatens famine in the whole Orient, and the world seems destined to witness the death of all the increases since the last famine.

The food question in Europe is just as critical as in Asia. France has checked the birth rate so as to have more food, and as an actual fact the per capita meat consumption doubled in the last half of the last century. Nevertheless, in spite of an enormous increase of wealth and ability to import food, there are now bread riots in France on the part of those unable to buy the importations, and also in Spain and Belgium. Germany on the other hand has always been industriously multiplying and sending out hordes to replenish the earth or steal it for the food unattainable at home. When they couldn't go in military formation to France, Italy, Spain or Russia they migrated individually, chiefly to America in recent centuries, for the meat famine at home made them covet our beef and corn. But so many others have been coming here for the same purpose, that there is not enough to go round now and we hear all kinds of complaints of the poorman's inability to buy meat—as though it were some new human phenomenon. Germany knows that the exodus of her citizens will end when it will be as difficult to get meat here as there—and then comes the deluge for which she is apparently preparing like the Japanese. "Land or food," is the cry now, as with the Goths and Franks from the same place. No wonder the Moroccan question will not down and may lead to war in spite of ourselves. What has been the benefit of the enormous birth rate which the German medical profession has

been praising? What is the use of immigration here, when every newcomer only hastens the meat famine? Cannot our dietetists realize that in a short time the poorest paid of our population cannot afford meat more than once a week, or month, or not at all? What will the human harvest be? Foreign famines increase our cost of living, so that the present crisis in Europe and the Orient is bound to have far-reaching consequences on our public welfare.

In spite of the fact that in the world as a whole, civilization has been making it possible for increasing millions to live in more and more comfort, there still is food shortage, and an inequality of distribution with more or less famine in spots and an exodus to food areas. The victory will go to the strongest battalions fighting for subsistence—and the source of the trouble is, now as ever, the German birthrate. As for American public health, let us suppress those illogical men who complain of the high cost of food from relative scarcity due to the greater demand for it, and who at the same time advocate more births and more immigration to increase that demand and high price. Every arrival on Ellis Island from famine areas shoves up the price of beef another notch. The dietetic lesson is the fact that a meat diet belongs to a primitive hunting stage of evolution, or the settlement of a new country inhabited by savages, and that with an increasing density of population we cannot afford grazing areas, so that meat becomes less and less available until it disappears entirely from the diet of the poor. We are destined to be largely vegetarians like orientals even if we must evolve a new type of man to digest the stuff.

ADVERTISING ETHICS.

Henry R. Strong, publisher of the *National Druggist* of St. Louis, has published in the form of a letter to Hon. William C. Adamson, Chairman of the Committee on Interstate and Foreign Commerce of the House of Representatives, a document which replies to some of the criticisms made by Dr. L. F. Kebler of the Bureau of Chemistry on Mr. Strong's testimony before the committee at the hearings on the Richardson bill. Dr. Kebler, it seems, took an unfair advantage of Mr. Strong and secured the incorporation into the printed record of the hearings of a supplementary statement containing the criticisms Mr. Strong is put to the necessity of replying to by circulating the above-mentioned document at his own expense.

Of the subject matter of the controversy little need be recorded here, otherwise than to observe that Dr. Kebler is made to appear in a rather unfavorable light, in his own testimony and by his own conduct, as well as in Mr. Strong's letter. A thing that ought to interest newspaper publishers in the controversy is the attitude of Mr. Strong on patent medicine advertising, a viewpoint not exactly new, but so well expressed as to induce us to reproduce his words. Says Mr. Strong:

I, as the publisher of a drug journal, would unhesitatingly accept the advertisement of a remedy of either of the classes mentioned [pennyroyal pills, soothing syrups, anti-fat remedies, consumption remedies, hair dyes, drug addiction treatments, remedies containing wood alcohol, etc.], provided it came from a representative manufacturer and on its face appeared to be legitimate, and was offered for sale by the druggists of the country. Physicians are writing prescriptions every day for the same conditions and diseases for which all these specified medicines are intended, and the only difference between Dr. Kebler and myself in regard to them is that Dr. Kebler would confer and is insidiously seeking to confer, by law, a monopoly of furnishing them upon his brother doctors, while I am unalterably opposed to any such policy.

But the fact of publishing these or any other advertisements does not, in the least, imply an endorsement of the articles so advertised, as Dr. Kebler strives to make it appear; and no well-ordered mind would so infer. The advertising function of a journal is, in this respect, somewhat analogous to the transportation function of a common carrier. The one brings an article to the attention of the consumer; the other transports and delivers the article itself. In neither case is the conveyor charged with the legal or moral duty of examining minutely into the claims made by the manufacturers or shippers as to the merits of their wares, beyond, of course, a rea-

sonable care that these claims are not knowingly fraudulent or that the wares themselves are not injurious or are not intended for an improper use. If an article is, on the face of it, honest, and there is a genuine public demand for it, there is no reason why the transportation company should not transport it, a dealer should sell it, or a journal convey information concerning it. Indeed, the withholding of these distributing functions would remove one of the most potent and trustworthy agencies of legitimate competition and ultimate discrimination between meritorious and meretricious commodities.

But especially does this position hold good in the case of a trade journal like the *National Druggist*, whose advertisements are not addressed to the public, but to dealers only, and, hence, do not exercise the function of creating a demand for the goods in question, but only of informing the dealer where they can be procured, by whom they are manufactured, the purposes in a general way for which they are intended and the prices at which they are sold. For me, therefore, to refuse to accept the advertisement of a remedy on the ground of illegitimacy, which I do not know or have good reason to believe to be a fraud, would be an arrogation of wisdom and authority on my part which I do not claim to possess, and would put me in the embarrassing position of trying to dictate to the druggists, denying to them the right to use their own judgment and discretion in matters wherein they are more competent and in a better position to form correct conclusions than Dr. Kebler, myself, or anybody else. Holding this view of the functions and purpose of trade journal advertising, I do not feel called upon to test the therapeutic claims of every remedy advertised in the *National Druggist* according to the arbitrary standard of any medical clique or school, however much the acceptance of such advertisements may offend Dr. Kebler or any other agent or servant of the American Medical Association, whether occupying a government position or not.

For certain reasons, among them the assumption that the proprietary remedy not dispensed upon the prescription of a physician, but used by the patient upon his own judgment and initiative, is a fraud *per se*, this assumption resting upon the further assumption that all medical knowledge lies with the medical "profession" and none with the laity, certain publications have refused to accept advertising from makers of "patent" medicines, even going so far as to deny their columns to veterinary remedies of known value or standard use, such as soaps used for mange in dogs. Incidental to this assumption of inherent fraud in proprietary remedies, has been an "arrogation of wisdom and authority" on the part of publishers together with a Pecksniffian attitude of superiority to the publisher who rendered advertising service to such patent medicine makers as were conducting a legitimate business and doing in many instances an important service to humanity. Mr. Strong's virile words are refreshing and reassuring. Much has been written on the ethics of advertising, but little of more value and directness than what Mr. Strong has said in extenuation (if you please) of his own crimes and misdemeanors in rendering advertising service to men whose business is tabu in certain "holier than thou" circles.

CHARGES AGAINST COMMISSIONER LADD.

There is perhaps some reason to hope that the food commissioner of North Dakota will exhibit at some future date signs of a near approach to human intelligence in the administration of his office. The courts have so often laid down the proposition that the scope of a statute cannot be extended by implication or otherwise that some attention ought to be paid to it by a man so observant as Professor Ladd. As prescribed in the North Dakota statutes and as admitted by himself, "is his duty to gather information with regard to all products that are sold in the state as articles of food, beverages, drugs, etc., and to make analyses of all such products; also, to make inspections with regard to sanitary conditions; and to give all such information to the public through bulletins and reports."

We assume that the duties of the food commissioner of North Dakota are correctly stated because the quotation is from Professor Ladd's own bulletin. It does not appear that the food commissioner's duties include the expression of opinion, editorial or otherwise, concerning the acts of other persons. All that the statute requires or permits is that he do the things set forth above. But in the very next breath he admits that "in the discharge of duty the commissioner has seen fit to publish a report on the methods of business as conducted by the Farmers' General Service Company of Minneapolis. The results of some of this information has been given in recent bulletins and, therefore, is familiar to the public."

The commissioner has "seen fit" to go outside the authorization of the law and in doing so he has no longer the protection of the statute prescribing his duties. If there is justice in North Dakota he will be very properly punished for libel. The aggrieved company has filed charges against him with the Board of Regents of the Agricultural College of North Dakota. If the outcome of these charges is disastrous to Professor Ladd, we do not see that he has anybody but himself to blame.

THE "IN BAD" CLUB.

Dr. Wiley, according to the Des Moines *Register and Leader*, recently gave utterance to the following:

W. B. Barney and the Iowa pure food department were among my worst enemies. So was Mr. Wright, who preceded him. They opposed me in everything and upheld the Remsen Board. I have found that those officials who opposed me, gave their states the worst food administrations. Their efforts in most cases can be said to be farcical. I refer to such states as Iowa, Illinois, Missouri and New York.

No, dear reader, Dr. Wiley was not the author of the commandment, "Thou shalt have no other Gods before me," but he thinks he was, and that serves every purpose of the Doctor.

The Point of View

Bread.

Water has a distressing habit of evaporating from things with which it is mixed. It seems to have a natural affinity for air. Bread has more or less water in its composition, and that is why tolerances for net weights of loaves of bread must be established by food control officials who would otherwise have their hands full prosecuting bakers for short-weighting their customers. A certain milling firm in Minnesota advertises: "— flour is hygienically made from strong, rich wheat, which absorbs large quantities of water. This makes more loaves." Ah! We suggest that bread made from this flour will bear watching. There was a movement on foot in England not long ago to establish a standard of nutrition for bread, and to have no other standard. Some superstitious consumers feared that this meant that plaster of paris was to be added to the bread, not to let it go higher than a certain point in nutrition. And harking back to the dim vistas of time (whatever those are) we are reminded that Louis XV. of France once issued an edict that bread which contained incidental quantities of plaster of paris should be eaten and no questions asked or kicks registered. That edict was one of the causes

of the French Revolution, in which many moderns have a passionate interest. With standards of tolerance on weight of loaves, why may we not reconsider the availability of plaster to give the loaf stability from a weight standpoint? A pound loaf of bread made wholly from plaster, properly kiln dried, ought to be able to stay at sixteen ounces indefinitely.

* * *

Adventures in Gastronomy.

The Board of Health of Indiana has decreed that henceforth patrons of saloon free lunch counters shall be served with individual and sanitary "tools." The common fork, or collection of forks, for the most part apparently souvenirs, and laved in a beer glass full of murky water (murkier as the day wanes) must disappear before the march of progress. The Board of Health or some other influence must have started something similar in Chicago. The other day a member of the editorial staff was moved to remark to the chocolate-colored servitor behind the lunch counter of the mahogany-fitted emporium where he grabs his frugal midday repast, "Seems to me everything here has a sort of a taste like carbolic acid, rather indistinct, but nevertheless characteristic." (This particular member of the editorial staff employs that kind of language off as well as on.) "Well, sah," said the chocolate-colored servitor, "seems like the Board of Health been around heah making us do things." The question is, how long before this sort of thing will extend to the high spots, and we will become accustomed, whether we dally with the French menus in the gilded haunts of the four-flusher or spear the charitable sandwich from the mahogany of the life-saving station, to the delicate flavor of carbolic acid, formaldehyde, chlorine, etc., and get so accustomed to them that we will grow suspicious of the sanitation if our daily food tastes natural?

Another member of the staff had a different adventure. Going into one of those very dignified places patronized by very dignified and ascetic business men and financiers, he ordered a split of appolinaris, a sandwich and some celery. The water and celery were delivered, together with a round object that felt to the touch enough like a sandwich to be eaten, with some subconscious misgivings (our staff member being absorbedly reading *Good Housekeeping Magazine*). After an interval the servitor (garcon might look better here, considering the preceding yarn) delivered another sandwich, or what was taken to be another sandwich. "When did I order that?" asked the member of the editorial staff. It was explained that this was the sandwich that was originally ordered. "Then what was that I ate?" demanded the member of the staff. "Must a been your check," responded the waiter.

* * *

Wiley's Successor.

Unless President Taft hurries up and appoints a successor to Dr. Wiley in the office of Chief of the Bureau of Chemistry the correspondents who are running around in circles will drop to the ground and froth at the mouth. Just look at this:

"If You Can't Afford to Eat Meat, Eat Beans, says Wiley's Successor."

"Dr. Doolittle Much in the Public Eye."

"Sensible Doolittle—Above All Things Don't Worry About How Hot It Is, He Says."

All headlines, my lords and gentlemen, all headlines betokening how desperate is the situation at Washington among the cigarette-and-white-collar chappies that

making their living hanging stuff on the wire. And the bally President, with all this evidence of distress before him, with Henry Parker Willis crying on his shoulder, simply won't do a god-darned thing.

* * *

Another League.

We are withholding the glad hand from Mrs. Julian Heath, new arrival. Mrs. Heath has the National Housewives' League back of her. That title reads a little like the National Consumers' League, particularly as it claims 200,000 membership. Mrs. Heath hasn't passed any resolutions yet that we have heard of, but she has made the retailers of New York sit up and take notice, or at least she says she has. Her motto is: "If you can't be good, be sanitary."

The press agent of the household show in Milwaukee succeeded in getting her picture in the papers, together with a description of which some of the foregoing is a synopsis. Mrs. Heath will be one of the attractions at the show and will organize a branch of her league in Milwaukee. Poor Milwaukee. It had a visitation of the National Consumers' League once also. We are withholding the glad hand from Mrs. Heath until we see how she stacks up.

FOOD INSPECTOR'S EFFICIENT WORK.

The need for closer inspection of dairy cows in small communities and the extension of the authority and appropriations of state food commissions for the purpose, is shown in the results of a recent investigation by Frank J. Hoey, chief inspector of the Illinois Food Commission, at Kankakee. Small communities rarely have ordinances under which such work can be done, and where ordinances are in force, an efficient inspection is rarely accomplished because of local conditions. The state authorities are much better equipped



HOW WOULD YOU LIKE TO USE MILK FROM THIS COW?

for the work and where the laws permit it and the appropriation is large enough, they can practically eliminate all possibility of contamination of local milk supply by diseased animals.

The case referred to was that of a cow belonging to a colored man named Wilson. The report of Inspector Hoey describes the work of himself and his assistant as follows:

"Complaint was made to this department by C. W. Dawson, Inspector McGrew and several others of Kankakee, that a colored family by the name of Wilson, living on the outskirts of Kankakee, had a cow with a large lump on her head with the pus running out of it, and that the owner was using the milk as food. The people of the city were afraid that this poor colored family might contract some contagious disease from the milk and transmit it to them.

"On June 21st, 1912, in company with Inspector Lindstrom, I went to Kankakee to investigate this complaint. Upon our arrival there we were met by Health Officer Thomas Bowman, C. W. Dawson and Inspector James McGrew of Kankakee, and we all proceeded to the Wilson home to see the cow.

"As soon as I saw the cow in the pasture I knew she was affected with actinomycosis, commonly known as lumpy jaw. The pus was running out of holes in her jaw. We milked the cow and took samples of the milk for analysis. In the meantime we notified Mrs. Wilson to use no more of the milk until they should hear from the Food Commission. She said she had thought something was wrong with the cow, and promised to use no more of the milk until she heard from us; she further told us that she was raising her son's four orphan children, and hoped that nothing would happen to them.

"The samples of milk which I brought in were examined by Dr. Louis J. Tint, bacteriologist for the State Food Commission, but no tubercle bacilli or evidence of actinomycosis were demonstrable.

"On July 1, 1912, I again went to Kankakee, in company with Inspector Kennicott, where we met Health Officer Thomas Bowman and Inspector McGrew, and all proceeded to the Wilson home. We found the cow in the pasture as before, and again took samples of her milk and pus from her head. Mr. Wilson told us that the day before he had taken about a pint of pus from the cow's head and used peroxide thinking he could cure her. I told him that the cow could not be cured, as the disease had gone too far; that she ought to be killed and her carcass put in the rendering tank.

"The next morning the cow was brought to the slaughter house and I had the butchers kill and skin it, and condemned the carcass to the rendering tank. I examined the cow after she was killed and found that the disease had eaten holes all through her jaw bone. I took samples of blood, milk bag, glands, intestines, spleen and different parts of the body for analysis.

"The state bacteriologist, from an examination of the samples from the jaw bone, glands of the neck, intestines, etc., found it to be an advanced case of actinomycosis; it was merely a question of time when it would have been all over her body."

"CANDY SHOW" IN NEW YORK.

The International Baking, Candy and Ice Cream Exhibit will open Monday, November 4th, and close Saturday night, November 9th, at Madison Square Garden, New York. It will be under the auspices of the New York State Association of Master Bakers and Confectioners and Ice Cream Manufacturers' Protective Association of New York State, and will embrace all machinery, tools, utensils, raw and manufactured products, which are used in the baking, candy, ice cream and soda water trades.

The chief object of the exhibition is to acquaint the public with modern conditions in the baking, confectionery, soda water and ice cream manufacturing trades, to exploit the wholesomeness and purity of their products, and the sanitary conditions under which they are made, thereby destroying unwarranted prejudices, in part created by recent pure food agitation and blindly opposed to pure as well as impure food products.

Lectures and various demonstrations during the show's course will interest and enlighten the public on modern improvements and attainments by the trades represented.

There will be shown in operation a field bakery from the commissary department of the United States War Department, to supply soldiers in the field.

There will also be shown a complete modern bakery making bread and cake from the flour to the finished product. A complete ice cream manufacturing plant, with the refrigerator system, showing the manufacture of ice cream and the raw product.

A complete candy manufacturing plant showing the various operations of turning sugar and chocolate into dainty and delicious hard candies, as well as chocolate.

The coming show is successor to a similar successful exhibition held at the garden in September, 1909. The exhibition space is rapidly being sold to leading manufacturers of the food products represented, machinery processes, and raw materials.

Woman—"Will you do a little work to pay for that food?"
Tramp—"I'll chop a little wood to forget it."—*Exchange.*

United States Department of Agriculture

OFFICE OF THE SECRETARY.

BOARD OF FOOD AND DRUG INSPECTION.

Food Inspection Decision 148.

USE OF COPPER SALTS IN THE GREENING OF FOODS.

The question of the use of copper salts in the greening of foods was referred by the Secretary of Agriculture, on March 11, 1909, to the Referee Board of Consulting Scientific Experts. Exhaustive investigations have been conducted by that board and the Department of Agriculture has received the report of the investigations. The questions which were referred to the Referee Board are as follows:

"Are vegetables greened with copper salts adulterated under the Food and Drugs Act of June 30, 1906, because,

"(a) a substance has been mixed or packed with them so as to reduce or lower or injuriously affect their quality or strength;

"(b) they have been mixed, colored, powdered, coated, or stained in a manner whereby damage or inferiority is concealed;

"(c) they contain any added poisonous or other added deleterious ingredient which may render such articles injurious to health?

"(1) in large quantities?

"(2) in small quantities?"

The main general conclusions reached by the Referee Board from a study of their experimental results and other considerations are as follows:

"(a) Copper salts used in the coloring of vegetables as in commercial practice cannot be said to reduce or lower or injuriously affect the quality or strength of such vegetables as far as the food value is concerned;

"(b) Copper salts used in the greening of vegetables may have the effect of concealing inferiority inasmuch as the bright green color imparted to the vegetables simulates a state of freshness they may not have possessed before treatment;

"(c) In attempting to define a large daily quantity of copper regard must be had to the maximum amount of greened vegetables which might be consumed daily. A daily dose of 100 grams of coppered peas or beans, which are the most highly colored vegetables in the market, would not ordinarily contain more than 100 to 150 milligrams of copper. Such a bulk of greened vegetables is so large, however, that it would hardly be chosen as a part of a diet for many days in succession. Any amount of copper above 150 milligrams daily may, therefore, be considered excessive in practice. A small quantity is that amount which in the ordinary use of vegetables may be consumed over longer periods. From this point of view 10 to 12 milligrams of copper may be regarded as the upper limit of a small quantity.

"It appears from our investigations that, in certain directions, even such small quantities of copper may have a deleterious action and must be considered injurious to health."

The food and drugs act of June 30, 1906, provides that a food is adulterated "if it contain any added poisonous or other added deleterious ingredient which may render such article injurious to health." The act also provides that a food is adulterated "if it be . . . colored . . . in a manner whereby damage or inferiority is concealed." It is apparent from the findings of the Referee Board that all foods greened with copper salts are positively adulterated under the first above quoted provision of the law, and that in certain cases foods may be adulterated under the second above-quoted provision.

The Secretary of Agriculture, therefore, will regard as adulterated under the food and drugs act foods greened with copper salts which, on and after January 1, 1913, are offered for entry into the United States, or are manufactured or offered for sale in the District of Columbia or the territories, or are shipped in interstate commerce.

All previous food inspection decisions on the subject of greening of foods with copper salts are amended accordingly.

The complete report of the investigations and conclusions

of the Referee Board on this subject will be published by the Department of Agriculture.

R. E. DOOLITTLE,
F. L. DUNLAP,
A. S. MITCHELL,

Board of Food and Drug Inspection.

Approved:

JAMES WILSON,
Secretary of Agriculture.
Washington, D. C., July 12, 1912.

AN OPEN LETTER TO BUYERS AND SHIPPERS OF EGGS.

Under the above caption, a letter signed by Miss M. E. Pennington, a special investigator of the Department of Agriculture, and approved by Secretary Wilson, has been sent out under date of August 6th, 1912.

"It is a conservative estimate that more than \$45,000,000 are lost in the egg-producing sections annually because of improper handling. This enormous loss is due to small eggs, cracked and broken eggs, dirty, stale, heated (hatched) and rotten eggs. Just think of the waste this sum means, from the time the mother hen loses from her business of egg laying in order to hatch and bring up the hens that lay these wasted eggs, to the money that the housewife pays for the bad egg that cannot be used. It is a loss to you, to the farmer, to every one in the egg business, and to the consumer. Will you assist us in our effort to save this loss and to improve the egg that finally gets to market?

"When farmers, peddlers, merchants, etc., come to you with eggs for sale talk to them about the improvement of the market egg, and enlist their co-operation in the elimination of this great loss. Here are some of the fundamental points to be considered by all egg men, whether producers, shippers, or middlemen:

"1. Encourage the production of large eggs. This can be accomplished by keeping pure bred 'general purpose breeds' of fowls, hatching only the eggs that weigh at least two ounces apiece and from only the most vigorous stock. A higher price for large than for small eggs will help along the argument.

"2. Infertile eggs do not hatch, do not form blood-rings and seldom form black rots. If the male birds are sold or penned up after June 1st the flock of hens will lay more eggs and they will be infertile.

"3. A year-round observation of New York egg receipts showed that over 12 per cent were dirty shelled, and sold for a lower price on this account. You should buy these dirty eggs at a lower price, for you are paid less for them. If one nest is provided for each six hens, in a cool, dark place, kept clean and vermin free, dirty eggs will be reduced to a minimum.

"4. More than ten per cent of the eggs received in New York during the year are 'seconds' because they are stale. Tell your egg men that gathering eggs every afternoon, or twice daily in hot or murky weather, keeping them in a cool, clean, dry place until marketed, and marketing at least once a week and more frequently in the summer time, will reduce the number of stale eggs greatly. Of course, stale eggs are worth less money than fresh eggs, all along the line.

"5. Can you convince your trade that eggs from stolen nests and from incubators are never fit for sale? If the farmer thinks they are good, reliable food urge him to eat them at home. For, since the egg buyer can afford to pay more for large, clean, fresh, whole-shelled eggs, it is good business for the farmer to use small, dirty, cracked eggs at home.

"6. Do you know how to candle eggs? If not, learn, and learn quickly! There is no other way by which you can determine the worth of what you are paying for. Having yourself learned how to grade eggs, show the merchants, peddlers and farmers in your neighborhood, by means of the candle, what kind of eggs they are bringing to you. Farmers are not scamps, nor egg buyers angels. Show the farmer the kind of eggs you cannot pay for and he will find a way to eliminate the bad egg and to make the good egg even better.

"7. When first quality eggs come to your packing house what means do you take to keep them so until they get to market? To build up and keep a good reputation for your output you must grade carefully and uniformly; pack in good fillers, flats, and cases; ship quickly and under good conditions. If you would be classed among up-to-date shippers you must have mechanical refrigeration that the chilling of the egg may begin the minute you receive it. Candle in a room where the temperature does not go above 55° F. Ship chilled, in a good

refrigerator car, in car lots. If you can not chill the eggs before shipping, use a refrigerator car, well iced, and ship only the minimum load, that the eggs may receive the benefit of the ice before the market is reached."

THE CHAMPAGNE QUESTION.

The question of what class of wines may properly be designated champagne has arisen as a result of a suit filed in the Federal court in St. Louis by the Government. Six cases of wine labeled champagne by the M. Hommel Wine Company of Sandusky, Ohio, were seized at St. Louis.

The charge of the Federal prosecutors is that the material is wine and that the labeling of the beverage as champagne is in violation of the pure food act. They maintain that there can be no champagne made in America, and that the beverage known as champagne must come from the vicinity of the River Marne in France, which was formerly the province of Champagne.

The defendants contend that any wine that is fermented in the bottle is champagne.

Commenting upon this case, the St. Louis *Star* says:

"What looks very much like a perversion of the spirit of the pure food law is the effort by the government to prevent any American made wine being labeled as champagne, on the ground that there can be no genuine champagne made elsewhere than in the Champagne district of France. The theory is not a new one. It was also applied to Burgundy. The contention of the government is that such names are geographical and can not be applied to products not made within the designated geographical district without misbranding, contrary to the provisions of law.

"The opposing contention is that, while such names were originally applied to products made in certain localities and the products were so named because of that fact, they really designate special kinds of products, and the same localities produce other things of like nature not so named. In other words, Burgundy wine is a special kind of wine and can as well be made elsewhere. Also champagne is a special kind of wine, and all wines made in Champagne are not so named.

"If the name were simply geographical, it would be applied to all wines made in that district, of whatever kind. That it is applied only to one kind is proof that the name is specific and not geographical.

"The French government recently discovered this fact. It undertook to restrict the use of the champagne label to certain districts in France, but the wine growers of other districts, who were making the same kind of wine, so bitterly opposed the effort that rioting ensued and much property was destroyed. The government was forced to abandon the theory that the name is geographical and adopt the opposite one, that it designates a special kind of wine wherever made.

"If France, the originator of champagne, has abandoned the geographical theory, why should the United States take it up, and by so doing restrict and suppress one of its own industries? There is no charge of fraud. There is no charge of misrepresentation of quality. Champagne made in this country is plainly labeled to indicate its origin.

"It is merely a philological technicality which should have no place in the administering of the pure food law, which is intended to protect the health of the people and prevent actual fraud. This applies as well to all well known varieties of wine made in this country, and to other things originally named geographically, but having a district characteristic not at all depending upon the place of their manufacture. When such a name is used and the label distinctly states the place of making, there can be no fraud. But there can be great repression of legitimate American industries by strict definitionists who consider shadows of more importance than substance."

COMMERCIALISM AS A BASIS FOR HEALTH.

The assertion recently made by Professor Hope, Medical Health Officer for the city of Liverpool, that "pounds, shillings and pence have been the mainspring of sanitary progress," sounds a little cold-blooded, but when it is remembered that international agreements regarding quarantine regulations, the shipment of merchandise and many other features which affect the public health have resulted from business demands, it must be confessed that though the professor's statement might have been clothed in softer language, he is not far wrong. Purely humanitarian work has been fruitful of great blessings to mankind, and the labors of those eminent and self-sacrificing scientists whose discoveries have been so valuable to the world are not to be underestimated, but the dissemination of the knowledge these men gained would be greatly restricted were not the way for its introduction paved by the institutions which have been erected by commercialism.—*San Antonio Express*.

Interesting Food Notes

NEW METHOD OF STERILIZING MILK BOTTLES.

Dr. M. L. Helm, State Bacteriologist of Michigan, has discovered a means of sterilizing milk bottles by the use of bleaching powder. The product sold in the various cities of the state will be tested in an effort to learn the standard of quality of the powder before it is recommended to dairymen.

SOME CHICAGO FOOD SUGGESTIONS.

Here are what the Chicago Department of Health recommend to eat in hot weather: Soups, fruits, vegetables, ice-cream. Eat only about one-half as much as you require in cool weather. As beverages these are recommended: Water, buttermilk, weak tea and clean milk; drink all you want of these. "Never put ice in your drinks, cool them by standing on ice," is a further suggestion.

THE WAY FRANCE EATS SNAILS.

French farmers find snail culture a profitable undertaking. As many as 500,000 "first quality" snails, the price of which throughout the year averages \$1.70 per 1,000, can be reared on an acre of land. They have to be fed only once a day, preferably in the evening, and, though extremely voracious, are by no means fastidious. After a fall of rain, which seems to sharpen their appetites, a bed of 100,000 will demolish a barrow load of cabbage in a very short space of time.

SOUTH SEA ISLAND FOOD ITEM.

A news telegram from East Northfield, Mass., says: "For the second time in his career as a missionary in the New Hebrides, Rev. Fred Patton returned to civilization to deliver addresses on his work, which formed a feature of the Northfield Conference of Christian Workers. Mr. Patton told of his experiences with cannibals of the South Seas and of numerous narrow escapes from death. He said that largely through the work of the missionaries the islands now had been transformed, and former man-eating fighters had become peaceful citizens. He appealed for more missionaries to be sent to that region."

PUTTING UP FRUITS WITH COMPOUNDS.

The State Chemist of Indiana is urging housewives to beware of "canning compounds" likely to contain deleterious substances. As these compounds may be sold under their proper names in most states, it would seem advisable for state officials to give the facts and let housewives judge for themselves whether they want to use them. For the most part they consist of salicylate combinations. Some have boric acid. The housewife who wants to use such things ought not to be deprived of the opportunity. If sold under a proper label the "canning compounds" are entirely legitimate as such, but in most states the goods they are used in could not be sold or served on the tables of boarding houses, restaurants or hotels because of legal inhibition. But the housewife may use the compound and feed the food so preserved to her own family or guests if she wants to.

MILK SOLD IN BLOCKS.

The markets of Irkutsk, in Siberia, are an interesting sight, for the products offered for sale are in most cases frozen fish. Fish are piled up in stacks like so much cordwood, and meat likewise. All kinds of fowls are similarly frozen and piled up. Some animals brought into the market whole are propped up on their legs and have the appearance of being actually alive, and as one goes through the markets one seems to be surrounded by living pigs, sheep, oxen and fowls standing up. But, stranger yet, even the liquids are frozen solid and sold in blocks. Milk is frozen into a block in this way, and with a string or a stick frozen into and projecting from it. This, it is said, is for the convenience of the purchaser, who is thus enabled to carry his milk by the string or stick handle.

APPLES FOR INSOMNIA.

People ought to know that the very best thing they can do is to eat apples just before retiring for the night, says the *Family Doctor*. Persons uninitiated in the mysteries of the fruit are liable to throw up their hands in horror at the visions of dyspepsia which such a suggestion may summon up, but no harm can come even to a delicate system by the eating of ripe and juicy apples before going to bed. The apple, proceeds

this authority, is excellent brain food, because it has more phosphoric acid in easily digested shape than any other fruits. It excites the action of the liver, promotes sound and healthy sleep and thoroughly disinfects the mouth. This is not all; the apple prevents indigestion and throat diseases.

MILK IN PAPER BAGS.

A paper bag has been invented in England for holding milk. It differs from previous inventions of the same kind in that the contents cannot be tampered with. The paper milk bag, it is claimed, is far cheaper than cans or bottles. It is compact, airtight, and easily closed and opened.

It is manufactured from casein, a preparation of cheese, and is completely sterilized. The material is tough, but flexible, and folds into a small space.

The bag inflates on the concertina principle when the milk is poured in. The mouth is then hermetically sealed, so that adulteration or tampering by venders is out of the question. Above all, the paper milk bag is clean. It will be used only once and then thrown away.

WHERE FRESH FOOD IS IMPORTANT.

In an address lately given before the Zoölogical Society of France, Dr. Jacques Liouville, the physician and naturalist who accompanied the "Pourquoi-Pas" on her Antarctic expedition, stated the chief physical troubles with which the crew had to contend were three in number, all, in this opinion, springing from the lack of fresh food. He therefore terms this polar malady "the disease of conserved food." The malady comprised symptoms of scurvy, polar anaemia and severe frost bites or chilblains, which frequently bled constantly. The underlying cause of all the affections is an alteration in the chemical composition of the blood. The heart functioned badly, and the patients suffered from terrible shortness of breath, frequent drowsiness, and oedema of the lower extremities. They were easily exhausted and unable to march, while the slightest movement brought on intense palpitation. However, all these morbid symptoms disappeared within ten days when fresh meat was obtainable, and did not appear again after the fresh wild celery obtained at Tierra del Fuego had been enjoyed for some time.

ANCIENT EDAM, THE CHEESE TOWN.

It has been ascertained that the newest house in Edam, where the cheese comes from, was finished A. D. 1737. This is the city hall of the town that, despite its 7,000 inhabitants, seems to be as dead as a doornail.

Edam is reached by one of the numberless Holland canals and the landing place is opposite the Jewish cemetery. The streets are broad, clean, distinguished for fine trees and fine old houses that tell of the glories of the past, but by actual count only eleven persons and three cats, one dog and one pig passed the city hall on a given work day recently, and the city hall is the center of the town's activity.

Edam went to sleep way back in the eighteenth century and has been asleep ever since. The only evidence of life was a riot in 1787, which the burgomaster quelled by a judicious distribution of bread, schnapps and cheese among the revolutionists.

There is no cheese manufactured in the town, shipping and tanning being the only industries. The cheese is made in the neighborhood of Hoorn and Alkmaar and is only merchandised in Edam.

ALFALFA AS A BREADSTUFF.

Recent dispatches from the west announce the fact that certain Colorado hotels are attempting to popularize alfalfa stew as a means of offsetting the high price of meat, according to the *Indiana Farmer*. It appears that alfalfa has been made into a very palatable bread for a long time. The only thing that has prevented its wider use is its color, which is quite similar to rye bread. The nutritious quality of alfalfa admits of no question. The one obstacle to be overcome is to give the bread, and presumably the stew, a more attractive appearance. There is, however, no more agreeable color to the human eye than the green of fresh-steamed alfalfa meal which is fed to live stock and poultry. If the stew looks anything like that it certainly should be a popular dish in Celtic communities, particularly on the 17th of March.

Seriously, however, if culinary experts are able to furnish us with a new class of food made from alfalfa and are able to convince people that alfalfa flour is a good substitute for wheat flour, much will be accomplished toward solving the problem of our future cereal supply—the price of bread will not rise as it now threatens to do.

NATURAL CAFFEIN-FREE COFFEE OF MADAGASCAR.

The consulate at Tamatave, Madagascar, has received some inquiries in regard to a "caffein-free" coffee growing in Madagascar and has secured information concerning it with samples from the Rev. Peter A. Bjelde, an American missionary residing at Fort Dauphin, on the southeast coast of the island.

This coffee grows wild in the forests a little to the south of Fort Dauphin, and is called "mantaska" by the natives. It is otherwise generally referred to as "cafe sauvage" (wild coffee). The Rev. Mr. Bjelde states that the mantaska tree is usually twelve to twenty feet in height and resembles the ordinary coffee tree, but has smaller leaves. Trees as high as thirty feet were seen, but they were very slender, thought to be due to the density of the forest.

The mantaska berry resembles the ordinary coffee very much, except that it is somewhat yellow when ripe, while the ordinary coffee is red. Perhaps this too would be red, but it has to be picked quite early in order not to be eaten by animals and birds. It is not possible to state even the approximate number of these trees, and no one has undertaken to cultivate them, or employ the fruit for market purposes.

FOOD VALUE OF BUTTERMILK.

An ordinary glass of buttermilk contains about as much nutriment as two ounces of bread, a good-sized potato or a half pint of oysters, says a recent bulletin of the United States Department of Agriculture. It thus contains about the same food constituents as skim milk, but it has an added hygienic value because the protein is more easily digested than the protein in skim milk, and therefore is often prescribed by physicians for children and invalids, especially those suffering from intestinal trouble.

Protein, being the most costly of food ingredients, is the one most likely to be lacking in inexpensive meals, and this is the nutrient which both skim milk and buttermilk supply in a cheap and useful form, and when taken with bread or used in cooking they form a very nutritious addition to the diet. Two and one-half quarts of skim milk or buttermilk contains about the same amount of protein as one pound of round steak, and costs about one-quarter as much. Two quarts of milk has a greater nutrient value than one quart of oysters. The nutriment in the form of oysters would cost 30 to 50 cents, while the skim milk or buttermilk would have a value on the farm of from two to four cents.

USEFUL DISCOVERY IN HAWAII.

For years past the sugar growers in Hawaii have been obliged in order to maintain the fertility of their sugar lands, to import large quantities of potash from Germany. The Stussfurt rock found in Germany contains nearly 22 per cent of pure potash. It is the largest known source of supply. Late investigations carried on by chemists under the direction of Dr. E. V. Wilcox, head of the Federal Agriculture Station in Honolulu, have developed a new and important source of potash supply. In the *Hawaiian Gazette* of May 3 Dr. Wilcox announces that the ordinary black volcanic sand, or lava cinder, millions of tons of which are deposited near the extinct craters in the Sandwich Islands, is found to yield from two to seven per cent of potash. The potash is not in a readily soluble form and disintegrates slowly, but the sand itself will serve to loosen and lighten the heavy soil of the sugar fields, feeding the soil for several years after admixture. The commercial value of the sand for fertilizing purposes, owing to the potash impregnation, is estimated at \$5 or \$6 per ton, and it is available at slight cost for cartage. The discovery will be the means of great saving to the pineapple growers as well as the sugar planters in Hawaii.

DO YOU WASH YOUR FRUIT?

A German investigator, having estimated by careful experiments the number of bacteria to be found on market fruit, tried different methods of washing it without injuring the flavor. He washed grapes, apples and pears that had been exposed to street dust, each time examining the wash water for the number of bacteria present.

While the first wash water yielded large numbers the second contained only a few, and the third a negligible number. A basin of water was used for the purpose, the fruit being moved about in it. When running water was used five minutes' time was allowed. Fruits with a firm, smooth skin should be rubbed before washing with a clean cloth to start the dirt.

The cleaning of delicate berries is a difficult matter. Such fruit should be purchased with care to avoid all that are too soft or which show sand or other visible dirt. Strawberries,

because they grow so near the ground, should not be purchased after a rain, which will spatter them with muddy drops. Only the freshest and cleanest berries should be served raw; more doubtful specimens should be cooked. By immersing them in water a few at a time and handling carefully such fruits may be washed without much loss of flavor.

Dried figs and dates are very commonly eaten without cooking or even washing, and yet they have been exposed for an unknown length of time to the contagion brought by dust, flies and dirty hands. In how many houses are oranges washed before they are brought to the table, or the lemon before it is sliced for the tea or lemonade, or before the skin is grated for flavoring? Yet the skin is often very dirty.

Shelled nuts purchased in market should always be washed and scalded before they are used, as they are commonly exposed to dust.

THE FAD OF UNCOOKED FOODS.

Going back to first principles, the latest food fad is uncooked or suncooked food. The advocates of this idea say that "before the use of fire primitive man took his sustenance as birds and wild animals still do, and there is evidence that he had better teeth, a hardier body and was exempt from many of the ailments from which people suffer today." Therefore they urge that nature should be allowed to do whatever cooking is necessary, according to a writer in the *New York Sun*.

"In all nature," say these people, "every animal but man finds food ready prepared. Then why should human being boil and roast and fry and in the end be worse off than those that eat raw food? In fact we have eaten some kinds of uncooked food for years, and so the step to a complete diet is not great.

"Lettuce, tomatoes, celery and fresh fruits are all uncooked. They are not predigested so that the stomach is not deprived of its rightful tasks. The real fact is that uncooked food calls for strong digestive organs, and while it calls for strong organs it produces them. No lion or tiger or cow has cooked food; no fish requires it; no bird or flower gets a boiled dinner. Why should we?"

These uncooked food advocates are running a close race with the frugivores, who eat only nuts and fruit. Those who adopt this method of eating do not touch grains or vegetables of any kind. Some persons who travel have become enthusiastic frugivores and congratulate themselves that they never have to fret over buffet cars or hotel menus. Their meals are always ready and their food contains no starch to clog the stomach and intestines. Pecans, pignolias, peanuts, chestnuts and other nuts are on their menu in capital letters. In eating three meals a day the frugivore eats nuts first, then sweet fruits and lastly several kinds of juicy fruits. Raisins, figs, prunes and dates are soaked before eating and tomatoes are classed among fruits.

The expense of either the uncooked food or frugivore diet is about the same as ordinary food, and none but the best fruits, nuts and vegetables are used.

"I am convinced," said a woman who lived on nuts and nothing else for a year, "that the frugivore's diet is the best one. I eat nuts at the beginning of the meal always. This gives them time and a chance to assimilate with the fruits that come later, and I always chew them to a cream. I did this long before I heard of the Fletcher method. I am in robust health and I attribute it to the salts which are found in abundance in fruits and nuts."

A physician who advocates the suncooked food diet makes out a diet list for each individual. Usually this consists of three or four raw eggs a day, three quarts of milk, fresh vegetables, such as lettuce and cabbage, all the salad dressing one desires and a new uncooked bread. This bread is made of raw grains such as wheat and oats and is pressed into a hard cake.

CLEANLINESS IN THE KITCHEN.

The bacteriologist finds no kitchen clean enough and the ordinary methods of washing dishes he is likely to call a "smear." Dishes have been tested to determine the number of organisms that remain on them after "ordinary" washing as compared with a method that requires an application of hot water with the help of soap, or, better still, carbonate of soda, a thorough rinsing in hot water, and wiping with a sterilized cloth (that is, one which has been in boiling water since it was used before). By this latter method the dishes were practically sterile, while many organisms were left on the dishes that were washed by the "ordinary" method, according to a current writer.

One might ask, what harm will they do? Oftentimes none, but if the bacteria are those which convey disease, dirty dishes

may be the means of giving it to well persons. But most of all, persons who are at all thoughtful of such things do not want any dirt which may be prevented by good methods, simply because dirt in itself is sufficiently unpleasant.

In washing milk utensils it is first necessary to remove with warm water all traces of the milk before scalding water is used. Because of the cream adhering to the sides soap is used also, but the greatest care must be taken to remove by repeated rinsing every trace of soap. A telltale flavor of soap in the morning cream has more than once revealed careless habits in the kitchen, and made it evident that all the soap was not removed in rinsing. The utensil must then be dipped in absolutely boiling water for a moment.

It is an important matter to wash the milk bottle in which milk is now commonly delivered to customers. By this we refer to the washing of the full bottle before it is opened. It is safe to say that this is seldom done. But notice the bottle as it is brought into the kitchen, the milkman grasping it with his hand over the top.

These hands perhaps more often than not have harnessed his horse, have been grasping the reins all the morning, have opened and shut doors, run along stair railings, have perhaps wiped mouth or nose, and yet the thoughtless housekeeper or cook, regarding the white cap as full security from the outer world, pours out the milk over a very dirty bottle brim. The milk bottle should be put under the hot water faucet for a moment and wiped dry with a clean cloth before opening.

Most housewives agree that milk bottles should be carefully rinsed before they are returned, perhaps more from a feeling for cleanliness than for absolute necessity, as the milk bottles in all well managed dairies are thoroughly scrubbed and washed before refilling. If such violations of this practice as recently came under observation are noted, when the driver of a dairy wagon washed out some milk bottles in a public drinking fountain provided for horses, refilled them and disposed of them to other customers, complaint should be made to the dairy and, if this is not sufficient, to the board of health.

Some State Rulings

Florida.

The following bulletins have been issued over the signatures of W. A. McRae, Commissioner of Agriculture, and R. E. Rose, State Chemist:

CIRCULAR NO. 6—BLEACHED OATS AND BARLEY.

The bleaching of damaged, mildewed, weather or soil stained grain, particularly oats and barley, by the use of sulphur fumes (sulphur dioxide) by which process such damaged, mildewed and stained grains are caused to appear sound and of better quality or grade, is clearly in violation of the commercial feed stuff law, which prohibits "the adulteration of any feeding stuff with foreign, mineral or other substances of little or no feeding value or with substances injurious to the health of domestic animals"; and also in violation of the pure food and drug law, first, in that "a substance has been mixed or packed with it so as to reduce or lower, or injuriously affect its quality or strength" (added sulphur dioxide and water); and, fourth, in that it has been coated or stained in a manner whereby damage or inferiority is concealed.

Notice is therefore given to all dealers, jobbers, and consumers that grains bleached with sulphur fumes (sulphur dioxide) cannot be legally sold in the state of Florida, and that such adulterated bleached grains will be subject to seizure and destruction as the law provides.

Regulation 15-(d) is modified to conform to this order.

Inspectors and sheriffs are directed to attach such adulterated bleached grains, wherever found, sending samples with full report of all facts, regarding the offering for sale of such bleached grain, to this office.

CIRCULAR NO. 4.

The attention of the Agricultural Department of the State of Florida has been called to the use of peat mull (muck, or partly decomposed vegetable matter) as a "filler," or adulterant, for stock feed—the sugar or molasses feeds in particular.

Under the commercial feed stuff law—Chapter 5452, Laws of Florida, Section 3—"any manufacturer, importer, jobber, agent or seller, who shall sell, offer or expose for sale . . . or who shall adulterate any feeding stuff with substances such as rice hulls or chaff, peanut shells, corn cobs or other similar material of little or no feeding value, . . . shall be guilty of a violation of the provisions of this act, and the lot of

feeding stuff in question shall be subject to seizure, condemnation and sale or destruction by the sheriffs under the direction of the Commissioner of Agriculture."

Under the pure food and drug law, Chapter 6122, Laws of Florida, Section 4—"that for the purposes of this act, an article shall be deemed to be adulterated—

"In the case of food—[which includes stock feed] first—If any substance has been mixed or packed with it so as to reduce or lower or injuriously affect its quality or strength.

"Second—If any substance has been substituted wholly or in part for the article."

Under both the commercial stock feed laws and the pure food and drug law, the use of "peat mull" or "prepared humus" (muck, partly decomposed vegetable matter) as an ingredient in stock feed, or as a "filler," is clearly illegal, it being of "little or no feeding value" and tends "to reduce or lower or injuriously affect its quality or strength" and "has been substituted wholly or in part for the article."

Complaint has recently been made to this department of "moldy and damaged feeding stuff" being sold and offered for sale in the state.

The attention of both the dealer and the consumer is called to the provisions in Section 3, Chapter 5452, Laws of Florida (the commercial stock feed law), as follows:

"The sale of moldy and damaged feeding stuff is prohibited in this state, except on full notice in writing to the purchaser of the nature and extent of the damage."

Several instances have been called to the attention of the department of the death of live stock, caused presumably by the use of moldy, damaged grain and mixed feed stuff.

There have been several outbreaks in recent years of "blind staggers" (spinal meningitis) among work animals, traced directly to the use of moldy, damaged feed stuff, containing the specific bacteria (micrococcus meningitis), the cause of this generally fatal disease.

All moldy, worm-eaten, damaged grain or feed is harmful to live stock and often contains the specific poison causing "blind staggers" or spinal meningitis.

The ruling of the Agricultural Department—the Commissioner of Agriculture and the State Chemist—under Sections 15, commercial stock feed law and of the pure food and drug law, is that "peat," "peat mull," "prepared humus" (muck, or partly decomposed vegetable matter) cannot be legally used as an ingredient or as a filler in commercial stock food. That all manufacturers, importers, jobbers, agents or sellers, who manufacture, import, distribute, sell or offer for sale any stock feed so adulterated with "peat," "peat mull" or "prepared humus" will be liable to the penalties of the said laws, and the offending material subject to seizure, sale, or destruction, as the law directs.

Also that "the sale of moldy, damaged feeding stuff is prohibited in this state, except on full notice in writing to the purchaser of the nature and extent of the damage."

Therefore "any manufacturer, importer, jobber, agent or seller, who shall manufacture, sell or offer for sale any such damaged, moldy feed stuff, without due notice in writing to the purchaser of the nature and extent of the damage, will be liable to the penalties of the law, and the moldy, damaged feed stuff subject to seizure, condemnation, and destruction by the sheriff, under the direction of the Commissioner of Agriculture."

The attention of inspectors of the chemical division and sheriffs is especially called to Section 3, of Chapter 5452, Laws of Florida—the commercial feed stuff law—prohibiting the sale of moldy, damaged feeding stuff, or the adulteration of commercial feed stuff—with "substances of little or no feeding value or with substances injurious to the health of domestic animals." Also to Section 4, Chapter 6122, Laws of Florida—the pure food and drug law—"in the case of foods" (stock feeds)—(second, third and seventh clauses, under the head of adulterations,) and their duties as prescribed in Section 3, Chapter 5452—the commercial stock feed law—and to Sections 9 and 12, of Chapter 6122—the pure food and drug law.

Illinois.

Touching the proper labeling of ice cream made from "syntho," a product containing beef fat mixed with milk, the Food Commission of Illinois, through John B. Newman, Assistant Commissioner, has made public the following:

"An investigation of the matter disclosed the following facts: During the month of June, one or more ice cream manufacturers in Decatur were using "syntho" in the manufacture of their ice cream, substituting a certain amount of "syntho" for cream. The product was then sold as ice cream without any statement or label disclosing the fact that "syntho" had been used in place of cream. At the time of inspection

(August 6th) it was found that, owing to the publicity given the matter by the press, the manufacturers who had been using "syntho" had abandoned its use, and a careful investigation failed to reveal the use of any "syntho" at that time. Pending the adoption of a standard for ice cream, it is the opinion of the department that if "syntho" is used in ice cream, it must be declared on the label, or the wrapper or package in which the ice cream is put up.

"The question of the wholesomeness of the article was not involved, and the inspection showed that the plants were generally conducted in a fairly sanitary method; however, at several plants directions were given to put the place in a more sanitary condition."

Michigan.

Gilman M. Dame State Dairy and Food Commissioner of Michigan, has issued an order forbidding the sale of colored, coated or polished rice in that state after January 1, 1913. He points out that the polishing of rice does not add any food value to the product, but is rather a detriment, as polished rice has been found to cause the disease known as berri-berri. The polishing is done merely for the purpose of pleasing the eye.

Minnesota.

Joel G. Winkjer, Dairy and Food Commissioner of Minnesota, has issued the following bulletins:

BULLETIN NO. 43—CHEMICAL CANNING COMPOUNDS.

At this season of the year it might be well to call to the attention of housewives and others the nature of certain substances which are sold by agents and others to be used in the preparation of canned fruit and vegetables. Such compounds or preservatives usually contain among other substances borax or its derivative, salicylic acid, or other drugs of like character, all of which are detrimental to health. No other preservatives than those known as the natural preservatives, viz., sugar, salt, spices, vinegar and sometimes alcohol, should be used in preparing canned goods for home consumption. These with the accompanying sterilization by heat make a wholesome and safe food. In a word, the housewife needs no drugs or chemicals when sound ripe fruits or vegetables are used for preserving or canning.

BULLETIN NO. 44.

As one of the results of food inspection, it is found that manufacturers are placing upon the market certain compound preserves which are improperly labeled and misleading, apparently for the purpose of deceiving the purchaser. The label upon a recent sample of so-called preserves is the best illustration of its character:

PRESERVED STRAWBERRIES.

The Contents of This Package is Prepared from Fruit, Fruit Juices, Granulated Sugar and Corn Syrup with Added Phosphoric Acid,

Manufactured by JOHN DOE & CO., Norfolk, Va.

The title of the product, viz., "Preserved Strawberries," is set forth in large, bold-faced capitals. The statement of ingredients is in very small and obscure type, doubtless with the intent that it will escape notice, and it very likely accomplishes that purpose. The majority of samples are found to contain from 50 to 75 per cent corn syrup (glucose), some cane sugar, the balance fruit juices (usually apple juice), and enough strawberries to give a flavor. There is nothing harmful in the above product, but it is not strawberry preserves. The regulations for jellies, jams and preserves are as follows:

Section 1. The terms "jams," "preserves" and "marmalade" as used herein shall be deemed to apply to a product consisting wholly of the fruit specified, preserved in a syrup made of cane sugar and pure water and containing no other ingredient. The term "jelly" as used herein shall be deemed to apply to a product consisting wholly of the juice of the fruit specified, with or without the addition of cane sugar and containing no other ingredient.

Section 2. If designed or offered for sale or use as, or in place of, or in imitation of either fruit jelly, jam, preserve, or marmalade, any substance or preparation which is not pure within the meaning of the above definition, the container shall bear a white or light colored label, upon the outside face of which label shall be plainly printed in the English language, in type not smaller than eight-point bold-faced Gothic capitals, giving as the principal name of the product the words "Imitation—Jelly" or "Compound—Jelly" (or jam, preserve or marmalade, as the case may be), supplemented by the name of each ingredient and the proportionate amount of each contained in said product, in the

same manner and style as above prescribed. The label shall also bear the name and address of the manufacturer.

Jellies and jams now on sale to the public or which are hereafter sold, must comply with the requirements above stated. On and after July 21st, 1912, inspectors are instructed to enforce these provisions.

A proper label for the above product is as follows:

COMPOUND
CORN SYRUP AND FRUIT PRESERVES
STRAWBERRY FLAVOR
Composed of Corn Syrup, Fruit and Sugar
Manufactured by
JOHN DOE & CO., NORFOLK, VA.

North Dakota.

E. G. Ladd, Food Commissioner of North Dakota, has issued under date of August 5th the following notice on catsups:

"During the past two years manufacturers of catsup have shipped into North Dakota considerable quantities of catsup, the basis for which was made from decomposed, filthy and rotten tomatoes unfit for human consumption. The wholesalers to whom these goods were furnished were permitted to remove the same from the state.

"The time has now come when the department will not permit said goods, if shipped into the state by the manufacturer, jobber or wholesaler, to be again removed; but if such goods are shipped into the state of North Dakota an order from the court will be asked, for the purpose of seizing and destroying the said goods as unfit for consumption and not suitable to be returned to other states for use.

"Retail dealers, jobbers, wholesalers and manufacturers are, therefore, warned against the handling of this class of products, and must expect, if the same are found upon the market, that the catsup will be destroyed. You are, therefore, cautioned to govern yourselves accordingly.

"Where foreign ingredients are used in the preparation of catsup, the presence of the same should be declared upon the label, and the name made to conform with the character of the product produced; otherwise the product is misbranded under the provisions of the North Dakota statute."

INDIANA IS TRYING TO BE SANITARY.

(From a Staff Correspondent.)

INDIANAPOLIS, August 10, 1912.

Enforcement of the sanitary feature of the state food law continues to attract the chief activities of the State Food and Drug Department. Inspectors in the field have been encouraged to give almost all of their attention to this phase of the work, since the matter of adulteration has been reduced to a point where, outside of milk and dairy products, it is no longer presenting a serious problem to the state authorities.

Hotels and restaurants, which are multiplying rapidly in the cities of the state, are giving the department most trouble. A movement has been set on foot by the department among the local health commissioners all over the state, to bring pressure to bear on the next general assembly to enact a law requiring a medical certificate before any person can be employed in handling foodstuffs in hotels, cafes or restaurants. Recent inspection of cafe kitchens in Indianapolis, the state capital, has spurred the state authorities on to greater activity in this respect. There it was discovered that the proprietors gave little attention to cleanliness on the part of the waiters or persons in the kitchens. Worse conditions were discovered in the restaurants, where it was found no attention whatever was paid to the physical condition of persons employed in handling food or dishes. The state authorities, in view of the fact the patronage of this class of eating places is steadily increasing, consider this one of the most important questions now confronting them.

During July 1,486 inspections of food producing or distributing establishments were made. Of these, only thirteen were graded bad, while only thirty-four were graded excellent. Those grading poor were seventy-eight; fair, 527; good, 834. These represented inspections in sixty-three cities and towns. Eighty condemnations were made, either for unsanitary or faulty construction.

Of a total of 257 samples of food examined, 190 were passed by the department as legal, while sixty-seven were found illegal. The illegal samples included a large number of samples of milk, for which thirteen dealers were prosecuted, and fines and costs assessed amounting to \$266.50. The milk, for the most part, was adulterated by added water, while some violated the statute providing against visible dirt. No preservatives were found in any samples.

The State Food and Drug Commission has gone to the State Railroad Commission with a formal petition for an order requiring railroad companies to clean cars before setting them out to be loaded with such foodstuffs as rice, sugar, hominy, beans, etc., shipped in cloth bags. Wholesale and retail grocers complained to the food authorities that thousands of dollars were lost annually in shipments because of the dirty cars injuring shipments so the consignees would not accept them. The Railroad Commission was consulted before the petition was filed, and assured the food authorities it was in sympathy with the grocers and that the matter would be taken care of if formally presented. A similar petition is to be sent to the Interstate Commerce Commission for an order concerning interstate shipments.

Indiana canners are preparing to undertake a campaign among the farmers of the state to induce them to raise white navy beans and peas for canning purposes. It will be represented to them that the Indiana land is suited to both crops, and that they will bring big returns. It is estimated that if the farmers can be interested, they can raise enough beans to make it unnecessary for the canners to import European beans, for which they pay a duty of 40 cents a bushel.

THE NATIONAL DAIRY SHOW.

While the National Dairy Show has each year given evidence of its usefulness to the dairy world, yet the rounding out of the seven-year period promises to give to the country one of the most valuable educational shows ever presented. With the thought in mind that the importation of dairy products is growing to a dangerous amount, and that present prices and general conditions concerning agriculture in America warrant a tremendous amount of work to stop the terrific drain upon our gold by foreign countries for products we should and must show at home, the attention of the management has been given entirely to the rendering of practical demonstrations on lines of the maximum of production at the minimum of cost, of dairy products. While features of intense moment on sanitary and hygienic methods will be presented, yet the paramount work of this great educational show is for the farmer.

Matters of breeding and feeding will be presented by demonstration and discussion; the better handling and marketing of dairy products will be discussed—in fact, everything that will tend to aid in profitable dairy farming will be here shown and talked over by the highest national authorities. The machinery department will have many active, interesting and instructive exhibits. It is the intention that every exhibitor shall have an opportunity to display his exhibit, wholly or in part, in active use, thus giving practical demonstrations under expert hands. But the cow and her place upon the farm will be the paramount issue; with \$9,000,000 annually being shipped out of this country for dairy products, the cow and how to increase her certainly has the most need of consideration by all patriotic citizens.

The show will be held this year, commencing October 24th, in the International Amphitheater, Chicago. While the show is national in name, it will be international in character, as by comparison alone are we able to see what is being accomplished the world over. Some new and useful classes are being added to the classification, which will be ready for distribution shortly.

CHEAP APPLES—PERHAPS.

The apple crop of the United States this year is estimated at 60,000,000 barrels.

Yet let no small boy hurrah too loudly over the prospect of cheap apples. Those apples are not gathered yet, and the returns may be several million barrels short of the estimates. Quite a quantity will go abroad, where prices are always high, and these will be the best of the whole crop.

Even as it stands, the estimates would give but a little over half a barrel per capita to the dwellers of this land; and where is the lad that could not eat many times that quantity in nine months—if he got the chance?

In 1896, the actual apple crop of this country was almost exactly what the estimates give for this year's crop. And in that year apples were cheap—in the country. City dwellers found them fairly dear.

Since then, the country has added more than 20,000,000 to its population. The average prosperity, while leaving much to be desired, is still greater than in that year, when the aftermath of '93 was still with us. The export trade has increased, and the demand for fruit at home has increased in yet larger measure.

Apples will be cheaper than they were, no doubt; but there is no fear of their overdoing it.—*Chicago Journal*.

The Heinz Vinegar Case

[A large demand for copies of the February, 1912, edition of the AMERICAN FOOD JOURNAL, which contained a review of a case in which Niedlander & Bischoff, of Pittsburgh, were charged with selling vinegar alleged to be adulterated under the Pennsylvania law, has induced us to reproduce the article referred to, the February edition having become exhausted.]

VINEGAR ADULTERATION IN PENNSYLVANIA.

An interesting case in which the adulteration of cider vinegar came under discussion was heard before Judge Josiah Cohen in Pittsburgh January 31. Niedlander & Bischoff were charged with having sold adulterated cider vinegar in violation of the following section of the Pennsylvania food law of June 18, 1897, as amended May 21, 1901:

"That from and after the passage of this act no person, firm or corporate body shall manufacture for sale or expose for sale, sell or deliver any vinegar not in compliance with the provisions of this act. No vinegar shall be sold or exposed for sale as apple or cider vinegar which is not the legitimate product of pure apple juice or vinegar not made exclusively of said apple cider or vinegar in which foreign substances, drugs or acids shall have been introduced, as may appear upon proper test; no vinegar shall be branded fruit vinegar unless the same is made wholly from grapes, apples or other fruits."

In the testimony it was brought out that the vinegar upon which the prosecution was made had been manufactured by the H. J. Heinz Company.

The chemists who testified to having analyzed the Niedlander & Bischoff sample said they did so in the manufacturer's laboratory in conjunction with its own chemist. This in itself is significant of the fairness with which the investigation was carried on.

Those who made the analysis were Prof. F. T. Aschman, of the State Food Commission; M. C. Albrech, Chief of the United States Food and Drug Inspection Laboratory, Department of Agriculture, Pittsburgh, and James A. Evans, of Erie, Pa. These chemists testified to finding the adulteration of the vinegar by the addition of "apple jelly" and water. They stated that their analysis indicated not less than 20 per cent of the final volume of the vinegar sold in Pittsburgh was "added" water, in violation of the act.

The following chemists who heard the testimony said that if the testimony offered by the other chemists was correct there was no question but that the vinegar was adulterated to the extent claimed by the state food chemists: W. P. Bender, of Bloomfield, N. J., chemist in the food laboratory of the United States Bureau of Chemistry of New York; Edward H. Goodnow, Chemist, Bureau of Chemistry, Department of Agriculture, under Dr. Wiley; Prof. William Frear, of the Chemistry Department, State College; Prof. C. B. Cochran, Chemist of the Dairy and Food Department since 1895.

It remained, however, for C. F. Mason, chemist of the H. J. Heinz Company, to make the most damaging admissions. His testimony differed from the chemists of the Food Commission, in that he estimated the amount of "added" water to be about 32 per cent of the final volume of the vinegar instead of only 20 per cent as the other chemists had held.

When questioned on the results of the analyses of all the chemists he admitted: "Regarding the results of the analyses, there had been, judging from my own knowledge of pure cider vinegar, without anything added to it at all that there had been added to it a substance high in reducing sugar."

In answer to another question he said: "All of our cider vinegar is manufactured just alike. We have all average acidity of about 6.2 per cent."

Q—"You add water, do you?"

A—"That was reduced, generally speaking now, without individual cases, to 4.7 per cent."

Q—"That would be a reduction of about 1½ per cent, would it?"

A—"Yes, sir."

Q—"Now in order to dilute cider vinegar that shows 6.2 per cent acetic acid down to 4.7 per cent, how much water must you add?"

A—"That would be about 32 parts to 100."

Q—"Nearly one-third?"

A—"Yes, sir."

Q—"That means that you would add a barrel of water to three barrels of cider, a little over three barrels of cider?"

A—"To three barrels, yes."

Q—"So that you would gain a barrel in every three, nearly?"

A—"Yes, sir."

Q—"Would you say these samples were about the average?"

A—"Yes, sir, they represent about the average."

Q—"Then it is true, is it, that the conclusion of these experts we have called, compared very closely to what you know to be a fact?"

A—"Yes, sir."

Q—"And that when they said at least 20 per cent was added, it was a conservative statement?"

A—"That was conservative, yes."

Q—"What other substances were added or are usually added by Heinz, besides water?"

A—"In the manufacture of the cider vinegar?"

Q—"Before it is put on the market?"

A—"There is concentrated sweet cider, known as cider jelly, added, to bring up the solids, which are naturally deficient to meet the requirements of the law."

Q—"Of Pennsylvania?"

A—"No, of New York state in particular, where most of our vinegar is made, and also in most every other state of the Union."

Q—"There is no such requirement in Pennsylvania, that you know of?"

A—"No, I don't believe there is a standard for solids in Pennsylvania. No standard set by law."

Q—"This cider was sold in Pennsylvania, in this county?"

A—"I don't know. I suppose it was."

Judge Cohen: Q—"It was made in New York State?"

A—"Yes, sir. I know it was made in New York."

By Mr. Langfitt: Q—"Don't Heinz make cider in this state?"

A—"They do not press any cider in this state, no, sir. We sometimes generate cider vinegar from cider stock made in other states and shipped in here in tank cars. We generate it into vinegar, on our generators here and market here. Most of our cider is made at outside points, where the apples grow the best."

Q—"Then do you wish to be understood as saying that the cider jelly in this vinegar was put in to comply with the requirements of the New York statute?"

A—"It was put in in New York state. It is illegal to manufacture vinegar in New York state containing less than 2 per cent solids."

Q—"Is there anything in the New York law that requires you to add cider jelly?"

A—"The law itself requires it. You cannot make cider vinegar with 2 per cent solids in it."

Q—"There is nothing in the law that says what you shall add to your vinegar?"

A—"Oh, no, sir."

Q—"There is nothing in the law that says you shall add water to your cider in New York state or in Pennsylvania?"

A—"The law does not require it, no, sir."

Q—"But you simply say that the cider that you make as the pure product—or the vinegar you make as the pure product of apple cider, you sometimes cannot sell in New York state until you put something into it?"

A—"Yes, sir."

Q—"The water for the reduction of this vinegar to a potable strength was added here at Pittsburgh?"

A—"Yes, sir."

Q—"But the apple jelly was added in New York to bring it up to the 2 per cent before the water was added?"

A—"Yes, sir."

Before the introduction of testimony by the defense Judge Cohen remarked: "Confine your examination to the development of the elements that go to make up the apple jelly as compared with the elements of the apple itself, how they differ, if at all. I will construe the water part of it in my own mind. I have done it already, but I would like to have a little information on that other subject."

The first witness for the defense was Sebastian Mueller, superintendent of the manufacturing department of the H. J. Heinz Company, and an employee of the company for twenty-

seven years. He proved a most unwilling witness on cross-examination. His testimony in part was as follows:

Q—"This particular vinegar, was it reduced in New York state or reduced in Pittsburgh?"

A—"You mean the water?"

Q—"Was it reduced to the 4.7 per cent here?"

A—"That was done here in Pittsburgh."

Q—"Then you brought it down to Pittsburgh in its natural strength?"

A—"Yes, sir."

Q—"So as to make it lawful New York vinegar?"

A—"Yes, sir."

Q—"How much was this reduced in Pittsburgh?"

A—"You mean how we reduced it with water?"

A—"Yes, sir."

A—"We simply use filtered water. . . . We pump a sufficient quantity of the cider vinegar into a filling tank, and add enough water to bring the acidity down to 4.7 per cent."

Q—"You say you make some vinegars that show a low percentage of acetic acid, and some that show high?"

A—"A slight difference."

Q—"And when it is high up to 6 per cent, you water it so as to bring it down to 4.7 per cent?"

A—"We reduce it, yes."

Q—"Why shouldn't you, in such a case, instead of adding water, mix your strong and weak vinegar together, those that are high in acetic acid, and those that are low?"

A—"We have so very little weak vinegar that there would not be very much to go around, and some years we haven't any."

Q—"As a matter of economy, isn't it more economical to add water than to mix the vinegar?"

A—"That would not make any difference. If you have the vinegar it would be as cheap and easy to mix the weak with the strong."

Q—"What is the price of your vinegar, wholesale, roughly?"

A—"Between 20 and 22 cents a gallon."

Q—"This apple jelly, like the sample on the desk here, is not vinegar?"

A—"No, sir."

Q—"It does not taste like vinegar?"

A—"It does not."

Q—"And it does not look like vinegar?"

A—"No, sir."

Q—"And at that time it is added your vinegar has been made?"

A—"The vinegar has been converted, yes."

Q—"So that you take this apple jelly, and you add it to vinegar because that is already complete?"

A—"Because we have to."

Q—"So that you are adding something that is not vinegar, to vinegar after you have made vinegar?"

A—"Sure."

Q—"So when you add the water you are adding it to vinegar that is already in existence and made?"

A—"Yes, sir."

Q—"And it would be vinegar without the water, if you did not add the water?"

A—"Sure."

Q—"And water, when you add it, is not vinegar?"

A—"Water is not vinegar; no, sir."

On further examination Mueller testified that in this last year the Heinz Company made about 2,250,000 gallons of vinegar in Pittsburgh, and of this quantity about 600,000 gallons was water, added after the New York vinegar reached Pittsburgh.

The Pittsburgh papers in commenting on the case refer pointedly to the fact that H. J. Heinz, head of the company manufacturing the adulterated vinegar, is president of the State Sunday School Association and prominent in the East Liberty Presbyterian Church and the Men and Religion Forward Movement. One of them adds: "At 22 cents a gallon for Allegheny river water, even if it is filtered, the Heinz Company must have added almost \$100,000 additional revenue to the proceeds from the sale of their vinegar more than it would seem to a man up a tree that they are entitled to get from their vinegar. We know Allegheny river water costs money, but it takes some great manipulations of chemistry, Sunday School Associations and courts to convert it into vinegar at the rate of 22 cents a gallon."

"How do you tell the difference between a yacht and a sailboat?" said the girl with the inquiring mind.

"By lookin' into the pantry," replied Captain Cleet. "If she carries plenty of refreshments and seegars, she's a yacht. If it's mostly plain victuals, she's a sailboat."—*Washington Star*.

HOW FOOD ADULTERATIONS ARE REGARDED IN CANADA.

There was a time when a large proportion of the spices sold in Canada, as well as of the coffee and jam, was grossly adulterated. "Jam" was sold in which turnips, grass seeds, and chemicals took the place of fruits. Coffee was mixed with chicory and rotten wood. Ground spices were weakened by admixtures of flour, starch, and other ingredients, which reduced their strength and their value to the consuming purchaser, according to the *Montreal Gazette*.

The case as regards ginger was set out in a recently-issued bulletin, the fifth in the record of the department of internal revenue that dealt with analysis of the article. In the first, issued in 1896, about a third of the samples taken were declared to be adulterated or doubtful. In that of the present year barely a sixth came under condemnation. It is reasonable to think, therefore, that publicity and an occasional prosecution are doing good work for the public. In regard to ginger the adulterations detected are not dangerous so far as the public health is concerned, but they are none the less to be condemned. They sometimes consist of the mixture with the ground ginger of starch or flour to add weight, and as both are much cheaper than ginger the fraud is apparent. Where a foreign substance was detected in the analyses lately made it was generally a starch, and indicated that there are still a number of manufacturers or dealers who follow this method of improperly taking advantage of their customers. There are apparently some also who follow the more scientific practice of extracting some of the essential strength of the article by steeping it in water or other fluid and then grinding the weakened fiber.

Other bulletins of the department lately made public give the result of the examination of samples of marmalade and vinegar. Marmalade has grown greatly in public favor in recent years. Its manufacture is largely in the hands of firms which seek to gain business by creating reputations as producers of good articles and to keep business by maintaining the quality of their merchandise. So of 152 samples that were subjected to analysis 138 were declared to be genuine and only fourteen were classed as "adulterated." The adulteration in the case of marmalades was not harmful, nor may it be called fraudulent. The standards for marmalade were accepted before the production of glucose or corn sirup had been perfected, and, sticking to the old rule, the analysts set down as adulterated, at least technically, samples in which glucose has been used instead of or in combination with sugar.

The bulletin declares in this connection that under modern methods of manufacture glucose is "a perfectly wholesome article of food." It is described as consisting mainly of dextrose (grape sugar) with varying quantities of dextrin (a product of starch). In ordinary processes of digestion, it is added, cane sugar (sucrose) is changed into glucose, and dextrin is produced by the action of saliva on starchy foods. Both articles are therefore nutritious, and it is admitted that there can be no reason, on the ground of wholesomeness, for objecting to commercial glucose as a component of marmalade or jam. It would be well, therefore, if some word other than "adulterated" were applied to articles of food containing glucose, as, if they are inferior in any way to similar products made with sugar, they are not rightly to be condemned even by inference.

In the case of vinegar the analysts are apparently somewhat at sea in regard to what should be the standard. There are three recognized varieties—wine, malt and cider—each having some peculiarities. As in the case of whisky, vinegar seemingly gets its qualities from the chemical impurities it contains. The legal definition of the article is "a more or less colored liquid, consisting essentially of impure dilute acetic acid obtained by the oxidation of wine, beer, cider or other alcoholic liquid." Acetic acid is also made commercially as a product of the destructive distillation of wood, and it is admitted in the bulletin that there may be no good reason for condemning such refined acid as a basis of vinegar. Such vinegar, however, is more for use in the arts than as a food preservative or relish.

The table article, according to accepted authorities, contains in addition to acetic acid small quantities of alcohol, tartaric, or succinic acids, various esters, albuminous substances, etc. It is added that it is well known that much of the vinegar on the market is actually made in whole or in part from acetic acid, and that it is difficult or even impossible by chemical analysis to detect small additions of acetic acid to fermentation vinegars.

The declaration that certain samples were adulterated with acetic acid does not mean their serious condemnation, if it means condemnation at all.

Views of the Press

The Altitude of Meat.

Congressman William Kent of California, himself a large cattle raiser, offers no hope of decrease in the high cost of meats. He figures that it costs \$20 more to produce a meat steer than it did ten or fifteen years ago, very largely owing to increased cost of feed. The once vast ranges have been taken up by individual farmers who raise the hay and corn that must be had to fatten steers.

Whether Kent is wholly right or not, a lot of things indicate that the thrilling proposition for generations soon to come is going to be intensified product—the scientific raising of much on a limited acreage.

Agriculture seems to move as a stream. It abandons vast territory in the east to take up, exhaust and leave the middle west for the ranges and the Canadian northwest. Its methods and processes persisted in these regions would mean awful shortage of food supply. But following this stream of pioneers slowly but surely is coming the fellow educated to make three crops grow where one was reaped in disappointment before. And side by side with him is coming the fellow who raises practically all that he consumes. The disappearance of the great cattle ranges and ranches is not wholly a calamity by a good deal.—*Madison (Wis.) Journal*.

The Buttermilk of Commerce.

Buttermilk is another of the lost arts. You can buy a glass of buttermilk almost anywhere nowadays, but if you know what buttermilk really is and must be, the police will be separating you and the salesman eftsoons, as Chaucer was so fond of saying.

Buttermilk in these degenerate times is made by giving a pill to skim milk.

This pill contains a lot of germs. As soon as they are immersed in the skim milk they come to life and begin souring its disposition. The result, within forty-eight hours, is a smooth, unchunky, sour liquid which resembles the buttermilk of the ancient and honest days about as much as burned crust health beverages resemble coffee.

Actual buttermilk was made in a churn. To enjoy it you had to go to a milkhouse, where there was a little stream trickling through, and dip it from the churn yourself. There were little chunks of butter in it, and it was thick and delicious. It wasn't sour; it was simply good.

Before long they will be making chemical pies, and when that happens the world will have ceased to be in the least attractive.—*Wilbur D. Nesbit in Chicago Evening Post*.

Proper Care of Bakery Goods.

Some bakers appear to think bakery goods are to be treated about the same as chunks of coal, kegs of nails, or farm tools. The careless way in which they are placed in the show windows or counter cases, the utter lack of any appeal to taste or appetite, the entire absence of any attempt to make the goods attractive, the evident indifference on the part of the baker to the impression his goods make on the passerby—these are some of the things that create constant wonder that such bakers sell any goods at all. That some bakers prosper in the face of such conditions only proves what a fine thing the baking business is, and what a success can be made of it with decent treatment.—*Baker's Helper*.

Growth of Trade in Canned Goods.

Has not the growth of trade in canned pork and beans been wonderful, and is it not due to satisfying quality rather than extensive advertising? Quality keeps demand enlarging, so that it grows so fast that double the price is paid producers of beans for raw material than they obtained before the canned article came into universal use.

When quality is high enough to make consumers talk of the excellence of any canned article, its economy and demand enlarges rapidly because every buyer is a missionary and worth more as a preacher than any sort of promiscuous advertising.

The people are quick to discern the policy of a store. When they find retailers who eschew canned goods of indifferent quality and keep only the best, so that there is no suspicion in the buyer's mind that there is danger of being dissatisfied, they become permanent customers and are uninfluenced by the cutters by any cheapness.

Competition dwindles when quality rules.—*American Grocer*.

New Start for the Pure Food Law.

The Federal pure food law has been in operation for nearly six years. While nobody can deny that much good has resulted from it, the law has always been vague so far as its administration is concerned. The question of the law's administration should be definitely fixed by enactment. Not only food manufacturers, but the administrators of the law, should know exactly where they stand. At present there has been clashing of authority that has been productive of strife and apparently a temporary cessation of activity.

The law should be amended in many particulars. The six years' operation should suggest to those who have had the administering of the law what amendments as to definitions and as to administration will best serve the righteous purposes of the law, prevent prosecution on mere technicalities and yet safeguard public welfare. Now is the time to amend the law for the better. And if not amended, there is nevertheless sufficient power lodged in the President's hands to affect the administration of it through his appointees.—*American Miller*.

Dr. Davis Rhapsodizes on Buttermilk.

Those of our readers through whose system sports the red-blood corpuscles must in the very nature of things possess a yearning for nature's most exhilarating beverage—buttermilk. Buttermilk is a composition of love, hope, happiness and optimism, concocted in a stone churn on the back porch of a farm house by a fat hired girl or the farmer's daughter, and is a thick, white fluid, with a velvety taste, and throughout the beverage floats little chunks of golden butter, and when drunk from the long-handled dipper at the door of the stone milkhouse causes the fount of brotherhood and fraternity to overflow a man's soul and he becomes an optimist and a poet. The world becomes pure and perfect, not a cloud obscures the silvery, sunny sky; far across the fields he can see the lark perched upon the top of a tall weed as it chirps its morning song; by the old rail fence the little wren sings its little song of love, and from the far distance the matchless melody of the mockingbird singing its lay to its mate and nestlings, is wafted to him by the gentle summer breeze. All through the summer nights the wind wanders over the fields and woodland and steals the perfume and nectar from the flowers and carries it to the meadows, where, by the aid of the dear bossie cow, it finds its way to the laboratory of the fat hired girl, and in the last analysis it becomes the very soul of buttermilk, that heavenly beverage that causes the wayfaring man, though a member of the press bunch, to laugh, hope, and love much.—*Davis' Magazine of Medicine*.

Taft and Roosevelt and Pure Food.

An evening paper says "the resignation of Dr. Wiley shows how greatly the Nation needs Roosevelt back." What for? Is it probable, if the Colonel were restored to his old position, that he would act any differently than he did when he occupied the Presidential chair?

While the Rooseveltians are making a fuss about Wiley, who did not leave the service for any other reason than to better his own fortunes by accepting a position with a high salary attached to it—which is more in payment of the advertisement the journal hiring him will derive from his notoriety than for any real service he can render—it may be just as well to recall the fact that the so-called Remsen board, which turned down Wiley, and virtually indicted him as ignorant of the knowledge which a man in his position should possess, was appointed by President Roosevelt.

The Remsen board may have been all wrong, and Wiley may have been all right, but the fact remains that Roosevelt, and not Taft, is responsible for the appointment of the former. And it is also a fact that while Roosevelt was in office there was precious little activity displayed in the prosecution of offenders against the pure-food law. What effective work has been done in that field has all been accomplished since the incumbency of President Taft.

Rocks Ahead for Coca-Cola Substitutors.

Recent court decisions in Coca-Cola and other cases point to a very rocky road ahead for all classes of imitators—whether they be counterfeiters of name or of product. Indeed, it is high time that something be done to protect manufacturers who have put brains, years, energy and money into originating superior products and attaining popularity for them, from unscrupulous persons who would build their fortunes on the success of others by means of imitation and deceit.

For example, the right of the Coca-Cola Company to the

exclusive use of the name Coca-Cola has been upheld by two recent decisions, as follows:

Recently in the District Court of the United States for the Northern District of Alabama, before Judge Grubb, wherein the Coca-Cola Company filed proceedings against the Magic City Bottling Company, et al, to prevent the defendants from using in any way or form the mark "Coca-Cola."

In that case, Judge Grubb, on the hearing for temporary injunction, granted an injunction against the defendants, holding that the Coca-Cola Company was entitled to the exclusive use of the name Coca-Cola as a technical trade-mark.

On April 4, 1912, Judge Sanford in the United States District Court, sitting at Nashville, in the case of the Coca-Cola Company vs. the Nashville Syrup Company, granted a temporary injunction to the Coca-Cola Company, restraining the defendant company from using the words "Fletcher's Coca-Cola," and upheld the Coca-Cola Company's exclusive right to the trade-mark Coca-Cola, and, also, held that any use of the name Coca-Cola by any other person, firm or corporation than the Coca-Cola Company constituted unfair competition.—*Midland Druggist.*

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Lovely Woman and Pure Food

By A. Stuart Macgregor.

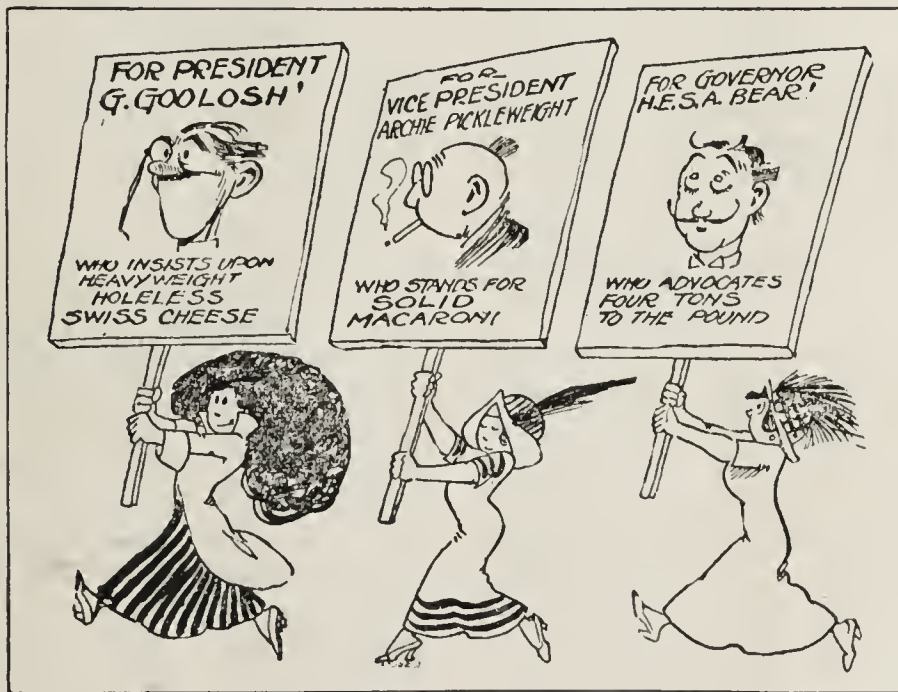
The other day Beatrice had salmon with cream sauce for dinner. The cream sauce had gathered a delicate pink hue because it was added to the salmon while it was cooking. It made a big hit with Beatrice. "I am going to have some of that the next time the club meets here," she announced; "isn't that a pretty shade?" I explained that the pink came from the salmon all right, but further back it came from an aniline or vegetable coloring substance that the packer had added to it before placing it in the can, the reason being that the packer couldn't sell white salmon because all housewives believed salmon was always pink, and if he offered it in the natural color he couldn't sell his wares. In other words, he had to use the coloring matter in order to protect his investment. But you should have seen Beatrice throw a fit. "The horrid, nasty stuff," she exclaimed; "I am going to throw it all out before baby gets hold of it." Of course it didn't make any difference about father, who had already eaten several mouthfuls. Here was a manifestation of one primordial instinct at least—the mother's frenzied anxiety for her young. And I submit that this little dinner-time scene also exposed another distinctly feminine trait, the which I shall let the reader analyze or uncover for himself (or herself).

If anything even mildly approaching criticism appears in what follows, do not take me as being a

woman-hater or even a woman-criticiser. I am no such thing, and I do not venture blindly into this matter of seeking out and vivisectioning lovely woman's attitude on pure food (and other things), because I know in advance that lovely woman will get sore and wind up by denouncing me as "just horrid," however unjustly she may bring in that verdict. I may also lose a few male friends, but this will not deter me. For I

accept and admire lovely woman as a mother, a sister, a sweetheart or a wife or even as a stenographer or a restaurant cashier, but I draw the line on giving her final arbitrament on pure foods and a whole lot of other things. And I don't blame Beatrice for putting the baby first. I do blame her, however, for getting rattled when I told her about the artificially colored salmon, for she had been buying and using the same article for over a year, and there was no reason for her sudden loss of confi-

dence in it when she found out the truth. Naturally, the basis of her erratic behavior was not difficult to locate. Not long before, as a delegate from the club, she had attended a lecture in one of those down-town places where culture of the club order is dispensed in large gobs and where, if you don't know anything, you can get pumped full of information on short notice. The lecturer on this occasion was a gentleman who displayed a long stocking that had originally been white, but was now dyed several



brilliant colors with "coal tar" dyes taken from candies that are ordinarily sold to children. The accompanying text must have been truly horrifying. I had heard a synopsis of it in a half-doze just before dropping to sleep that night (that being as far as Beatrice ever goes with the Mrs. Caudle stuff), and a sort of subconscious memory of her relation of this experience doubtless prompted me to expose the unfortunate salmon.

I have a vivid remembrance of a certain epoch-making event some years ago. Perhaps this ought to be described as a crisis or a tragedy. The wounds are not healed yet. Big sister came home from the seminary, where a course in domestic science had been lately added to the curriculum. This course was not as elaborate as the later editions, and if I may judge by results, it had not quite as much logic (or perhaps I had better say, appeal to the feminine mind). Mother is now deeply engrossed each month in the domestic science department of her favorite journal, but at the time I speak of domestic science as a living, breathing actuality had not got very far into the tall and uncut. Sister arrived home one vacation full of domestic science and girlish enthusiasm (mingled very much like macaroni and tomatoes in the popular viand known as *macaroni à l'Espagnol*). It was quite refreshing to see her assume charge of the entire household, including the kitchen, dining room and our collective and individual stomachs. Mother stood it about three days, or to be exact, two days and two meals, for supper on the third day was served to all of us but sister, who was upstairs sobbing her heart out, after the good old-fashioned manner that had prevailed in our household since great-grandmother's time. The trouble with the domestic science thing of that early epoch was that it was so new that even its exponents were afraid of it and they had to make it bizarre in order to get it over. Nowadays domestic science looks so much like the good old-fashioned idea of housekeeping and cooking and making the home attractive that I have great hopes that Beatrice will turn out all right after all. But the feminine mind has got to be thrown first into a hypnotic state by something startling, then it will embrace, without first having to go through the enduring and pitying process, anything at all that the chap with the blue-veined forehead and long, attenuated locks says. This explains a little further the psychology of the influence of the colored stocking on the colored salmon. Now note that the male lecturer on pure foods or domestic science or any of the assorted subjects that spell Culture always carries it along with the ascetic, high-brow front, while the female propagandist always wears wavy brown hair, pink cheeks, a checked apron and at least 190 pounds of carefully-corseted *avoiropois*. This is not necessarily teamwork. I suspect that it is a scheme to allay the occasional indignation of hard-headed husbands who may kick over the traces at too much domestic science or household hygiene or pure food, or whatever temporary name the affliction masquerades under. Hubby gets up at the usual hour and finds that he can't eat his favorite cakes until he has had an ice-cold bath and gone six times around the half-mile track. Naturally he becomes intractable and only his natural tendency to love the mother of his kids keeps him from going downtown, grabbing a set of "sinkers and coffee" and going directly to his lawyer. An hour later, with the cakes successfully stowed away, hubby still has his doubts, and here is wifey's chance. "Oh, you must come to the lecture next Tuesday and meet Professor

Highbrow and hear him explain all about it," she gushes. And hubby falls. Professor Highbrow does the rest. Or the formula varies and hubby is led up to the altar presided over by the high-priestess with the wavy brown hair and the checked apron (not to overlook the straight front), where he becomes a willing sacrifice.

Out of the teachings of Darwin has been evolved the theory that woman came before man—that the male as a separate sex was not known until long ages after life appeared. The Mosaic account then becomes a parable, thereafter a myth, and finally a heresy. But there is much of logic in the view that woman arrived last. There is all the evidence of the growth of language, and philology is not a study of myths or theories, but of actual facts. The feminine forms of words in most languages have the earmarks of being afterthoughts. In the sense that femininity is spiritually all-embracing, we have the language builders granting the feminine grammatical form to the collective and abstract noun. Let us open up the book of nature, without reference to Moses and his heresies, and observe the incomplete figures of lovely women; see how closely it approximates that of the child. From this let us move to an analysis of lovely woman's mental processes long enough to note how large a part the search for novelty and desire for change plays in her history. This trait is not confined to woman, however. Man has it, in a better organized way, but we must gaze at times with pity on the attempts great big horrid man makes to build mountains out of molehills and call them political issues. Woman is more primitive in her creation of ideals, that is all. But we must give her credit for gilding the gingerbread of her social activities very shrewdly, so that the dull brown color is thoroughly concealed. And one of her ways of gilding the gingerbread is to take an interest in pure food, domestic science, social hygiene and what not, whether she knows what they are or not. This interest is frequently stimulated exteriorly by adroit press-agenting, so that somewhere along the line some one reaps a benefit, even if the ultimate consumer, for whom lovely woman goes so bravely to the fore, be not vastly helped, but rather, perhaps, uncomfortably jostled and pricked in the region of the pocketbook.

Lovely woman's methods, the furore she creates, the enthusiasm she arouses in herself and imparts to others, are sometimes copied by mere man with much effect. About this pure food thing there is nothing in the nature of a crisis, nothing to call for crusades or parades or even lectures about white stockings dyed red and blue and green by "coal tar" dyes. And presently we shall see it taking on another phase—one more of desuetude than of blood-quickenning fervor. Nevertheless, lovely woman attacks pure food as if her life depended upon the success of her assault. There is all the external evidence of a crisis in our affairs. Even apologists arise who admit that things once were pretty bad. "Once" was when boric acid and salicylic acid and their compounds were used as preservatives in foods. These have been driven out. To what purpose? We still have salt and acetic acid. That is the *summum bonum* accomplished to date by pure food agitation. To cure an evil we must have an evil to cure. The results accomplished along the line of changing the labels on our foods I look upon as negligible, for in that we have merely proceeded from the realm of palpable lies to the realm of impalpable lies. For instance, a maker of condiments advertises in red type on his bottles: "This article is free from ben-

zoate of soda," thereby uttering the impalpable lie that benzoate of soda is harmful. There is another movement from fancy to fact in labeling in the very interesting arithmetical and natural history studies now presented for the first time. Our law-givers give us credit for having proceeded as far as percentage in the arithmetical text-book. Next they will discover that we have learned chemistry and Latin and we shall have a recrudescence of this pure food thing with our labels turned into Latin and chemical terms. Then, instead of "Canned Peaches" with the blushing fruit on the label we will have "Prunus Perscia" in type a certain number of millimeters high.

But lovely woman will not accept my dictum on this subject. She will go forward in the panoply of her primordial emotions and her child becomes all the children of the world and everybody else threatened by this monster who would deprive us of pure food. If there is no crisis she will create one. And, as aforesaid, therein she sets a shining example. Lately a well-known citizen of this republic has been doing the same thing. For the purposes of comparison may be set down some of the things that might constitute a crisis in our national affairs:

A famine or pestilence of large proportions.

A foreign war.

A diplomatic controversy with a large foreign power.

A contemplated change in an important national policy.

There are a number of other things that might by a stretch of the imagination be called crises requiring a man of the hour to meet. But two of the things above quoted can be described as covering a situation in this republic, namely, a diplomatic controversy with a large foreign power and a contemplated change in an important national policy, these being represented by the protests of Great Britain against the American plan to give our coastwise merchant marine free use of the Panama Canal and by the tariff question, but neither of these has been advanced by the aforesaid well-known citizen as issues at all. Nevertheless he has been able to convince a good many people that a crisis exists and that the man of the hour in the person of himself is loudly called for to come forth and save the country.

And I doubt not there are many women actively engaged in what they think is a fight for pure food who firmly believe that we are at a crisis. Such a belief must have bolstered up Caroline Bartlett Crane in her recent effort to secure a Congressional investigation of the meat inspection service. This feeling has this logical result: The public press, which is to a great extent the public pulse, and stands otherwise in much the attitude to the public that a sounding-board occupies in an auditorium, takes up the echoing hue and cry and enlarges it, carrying it on to parts of the body politic that would be affected otherwise only as by a distant incoherent noise. An example of the eventual result of this agitation was the attack of a prominent newspaper on the Secretary of Agriculture, under the proclaimed belief that a crisis existed because of a great wrong being done by the Secretary, actively or passively, when, as a matter of fact, the evil did not exist except as we may believe the teaching of our Christian Science friends that all wrong is in the mind. At any time we may see this great newspaper fletcherizing its words about Secretary Wilson.

The pure food agitation has had one illogical effect. Much good food has been destroyed by actual author-

ity of the law. The pure food agitators have been like the agitators in the French Revolution whose frenzy against royalty and nobility made them lop off the heads of the just and the unjust. Noble or royal blood was the stigma, just as in the case of foods a lying label or a harmless adulterant has been the signal of destruction. Vinegar by the thousands of gallons has been poured out on the ground merely because it was labeled pure apple cider when it was really colored distilled, but nevertheless wholesome and true vinegar. Thirty months ago several carloads of macaroni colored with a harmless dye were destroyed because an enterprising government chemist injected some of the coloring matter into a guinea pig and thereby compassed the animal's death. Examples could be multiplied. Under the rulings of enthusiasts who wear government socks it is possible to destroy an incalculable amount of good, nourishing food. Women applaud these things because they believe good is being done, and the government officials go ahead and do them in many cases for the applause women give.

The substitute food, however harmless or however nutritious, has fallen under lovely woman's ban. She reads on the label of a bottle of extract, "Tonca bean, vanillin and coumarin, substitutes for vanilla," etc., and straightway says, "No bogus vanilla for mine—give me the genuine" (which costs twice as much). This despite the fact that she has used the spurious and gotten good results in her cooking up to the time she makes the discovery.

The quest for pure food should resolve itself into, first, a quest for clean food; second, a quest for food at a price somewhere near its food value; and, third, a quest for food well cooked and served. Too many housewives neglect the economies of food purchase and preparation. They like to discuss these things in the club and listen to learned lectures on calories and fuel energy, and then go home and either misapply the lesson or let Hilda misapply it for them. Hubby notices that grocery bills are high and the family table is ill-supplied. Wifey claims it can't be so because so-and-so came up at the club the other day and they discussed it to a frazzle and solved the whole problem for all time—hubby is simply mistaken.

Education, whether in domestic science or anything else, is not education unless it enables us to detect fallacy. The domestic science department of a fashionable eastern school took a lot of the girls to New York recently and led them through Washington market. Here is what they saw and learned, according to the *New York Mail*:

Philip Reid, chairman of the executive committee of the Washington Market Association, piloted the class.

They saw Peter Hickey cutting chops. Then they watched Billy Heise display seven separate kinds of cheeses.

"The best Swiss cheese is that with the biggest holes," said a mere man onlooker.

"Really?" gasped one of the girls, and entered the fact in her notebook.

Red snappers were described as "that pretty pink fish," and salmon was called "simply stunning." At 35 cents a pound it deserved being called something as expressive as that. Soft shell crabs shared interest with the lobsters.

Mr. Murley gave a lecture on the age of round clams. It is all a matter of rings and ridges. One ridge for each year.

"All the clams are transplanted," he said. "These came here from Rockaway. The spawn came from Prince Edward's Island, or from the south. If we didn't steal the seed and plant it here, we wouldn't have any clams."

"Oysters? Madam, oysters should not be mentioned three months in the year—June, July and August. In May they may be spoken of, but not too loudly."

He twisted a knife deftly around a clam shell and offered the bivalve to the little blonde in the close-fitting bonnet.

She ate it with relish. The girl with the big peanut straw hat shuddered. "Ugh!" she said, "I couldn't eat it alive!"

"Look!" cried another future housewife, "this clam has its mouth open." Mr. Murley tapped its shell with the knife handle and it closed.

"It is yawning for air," he explained. "When they won't shut up when you rap 'em throw 'em out. They're no good."

Butter, eggs, meat, fruit and vegetables were all inspected and explained.

The difference between steaks—sirloin, porterhouse, tenderloin, chuck, round, flatbone and bone—was analyzed. Loin chops and French chops were compared.

The mysteries of artichokes and alligator pears were made clear. All in all it was a perfectly beautiful morning. Everybody said so.

If you eliminate fifty per cent of this as piffle, gush and "human interest," there still remains a picture at which lovely woman should blush. And that picture is most likely the true one. "Say, Mag," I overheard one girl say to another at one of those grabatoriums (or *grabatoria*, if we would stick to Ciceronian Latin), "what kind o' pie was that you took—cherry or cranberry?" "Search me," answered Mag, "I picked it out by the color. Tell you when I get to it." Mag ought to have gone on this tour, where "butter, eggs, meat, fruit and vegetables were all inspected and explained." Possibly they went into fruit as far as cherries. It was the dear creatures' first introduction to food in its primitive stages. Henceforth they can refer to it as a thrilling adventure and pass the tale down to their children and grandchildren to be recorded as a wonderful event. It may even figure in some of the accounts as an educational stunt.

When lovely woman gets tired of pure food, what will she turn her attention to? Some absorbing subject like equal suffrage, or dress, or eugenics, no doubt.

IMPORTANT ACTION BY RETAIL DRUGGISTS' CONVENTION.

Much of the interest in the annual convention of the National Association of Retail Druggists at Milwaukee August 13th to 16th centered around the action taken on a number of legislative subjects. The much-discussed Owen bill in its present form was disapproved. The association in previous conventions had endorsed the bill provided its sponsors, the American Medical Association, would confer with the association and agree upon such changes in the bill as would properly recognize pharmacy. The medical body having continued aloof, insisting upon the bill as drawn, it was decided by the convention to oppose the bill in toto.

A model bill designed to restrict the sale of drugs to registered pharmacists was authorized by the convention, to be prepared by its legal department and placed in the hands of all affiliated state and local associations when request is made for it by them.

The convention decided that the anti-narcotic bills before Congress are faulty and will fail to yield the protection to the public which they are relied upon to bring, besides working needless hardship to the retail drug trade, and it was therefore decided that a special committee of five retail druggists, assisted by the association's counsel, be appointed to draft a suitable bill and place it before the legislative committee and they in turn before Congress at such time as legislation of this character is again under consideration.

The following resolution urging a single standard for drugs and pharmaceutical preparations was adopted:

"Whereas, Section 7 of Regulation 7, of the food and drugs act permits the sale of United States Pharmacopœia and National Formulæ preparations of various strengths, providing such strength is designated on the label, and

"Whereas, Such provision causes much confusion in the enforcement of pharmacy laws providing for the use of United States Pharmacopœia and National Formulæ names on the drugs of standard strength alone, be it

"Resolved, That this section should be repealed or so amended as to provide that all drugs sold to the public under their official names or resold to the public under their official names or recognized synonyms, shall be of standard strength."

A resolution was also adopted condemning the use of narcotics and hypnotics in soothing syrups and urging members of the association to discourage the use of such ingredients by refusing to handle such preparations.

PLANT CANCER ANALOGOUS TO HUMAN CANCER.

Bulletin 235, Bureau of Plant Industry, just issued by the United States Department of Agriculture, is a good answer to those who have said that the department cares nothing for the health of men and women but will at any time send an expert across the continent in a desperate hurry for the sake of a sick pig. The bulletin is entitled: "The Structure and Development of Crown Gall," and it would have only a botanical interest but for its subtitle, "A Plant Cancer." The substance of the bulletin, which is fully illustrated by photographs taken from the microscope, is devoted to showing the various ways in which a common growth on plants is like malignant human tumors. For the most part the illustrations speak for themselves, but a lucid commentary is added, and many striking comparisons are made, which ought to go far toward stimulating additional researches into the cause of cancer in man, considering that in spite of many studies nothing is yet known as to its cause.

Curiously enough, in all the years of cancer research and out of all the effort put forth to discover the cause of this mysterious disease, it has never occurred to investigators that there might be an analogous disease of plants which would throw light on its origin.

The Laboratory of Plant Pathology, Bureau of Plant Industry, has been giving a good deal of attention in recent years to the subject of tumors in plants. These tumors range in size from a half inch or less in diameter to a half foot or more. The name commonly applied to them is crown gall, but they grow on various parts of the plant. They occur on fruit trees, berry bushes, rose bushes, ornamental trees, etc., and are very common throughout the entire United States and also in the old world.

As is well known, cancer in human beings and animals is able to spread through the system and cause an outbreak of the disease in parts previously healthy and often at considerable distance from the original tumor. Removal of a cancer is successful in checking the disease only when the operation is performed before the disease is well established and has spread its fibers far beyond the affected part. This habit of insidiously creeping along the various channels of the body, from diseased to healthy parts, makes cancer hard to eradicate. Up to the present day no absolute proof of the cause of cancer has been given. Many other diseases of mankind are known to be caused by specific organisms that can be isolated and studied, but the cause of cancer has continued to elude the search of hundreds of careful scientists. Many thoroughly trained investigators are giving every thought and energy toward solving this great problem and without doubt it will be solved.

Some of the facts brought to light by the department studies are these: Crown galls consist of an overgrowth of the plant tissues themselves, and in general appearance are not unlike cancers, and which like the latter are destructive to the individuals harboring them. Like breast cancers, these growths send out roots into the deeper sound tissues and upon these roots secondary tumors develop, so that, when excisions are attempted, if any portion remains a new growth develops exactly as in cancer; also the secondary tumors developed from the strands or roots have the structure of the mother tumor. For example, when a primary tumor has developed on a stem the roots of this tumor often enter the leaves and there develop secondary tumors which are not distorted leaves, but have the structure of stems; the tumor then destroys the leaf, developing as a morbid perishable stem. Other likenesses are pointed out.

What makes the matter so interesting is the discovery made in the department that these plant cancers are due to a micro-organism which has been cultivated pure and with which they can be produced at will. The bacteria have been isolated both from the primary and from secondary tumors. The organisms occur inside the cells and under its stimulus the mechanism of abnormal growth is accomplished. By these experiments, which number hundreds, a searchlight has been thrown, it would seem, on the whole cancer problem, for if there is a specific organism causing a disease in plants which closely parallels cancer in its inception and manner of development (and the bulletin seems to prove that indisputably), then there is every reason to think that cancer in men and animals must also be due to some parasitic organism, upon the discovery of which a remedy may be conditioned. The many difficulties encountered in determining the cause of this plant disease should at least interest students of human tumors to reconsider the possibility of their parasitic origin.

Our Washington Letter

By Our Staff Correspondent.

WASHINGTON, September 10, 1912.

The resignation of Dr. Frederick L. Dunlap from his position as associate chemist in the Department of Agriculture, which ipso facto carries with it his membership of the Board of Food and Drug Inspection, the Eighth International Congress of Applied Chemistry and the continuing vacancy in the chieftaincy of the Bureau of Chemistry, probably constitute a trinity of topics to which the attention of food and drug manufacturers has been drawn more than once during the past month and they will probably continue to turn their eyes to the place once filled by Dr. Harvey W. Wiley more than once during the coming month. The vacancy, it now seems,



DR. F. L. DUNLAP.

will continue for an indefinite period, because President Taft will not make an appointment so long as it is possible for him to continue the search for a right man.

Dr. Dunlap's resignation, to accept technical chemical work for the Victor Chemical Works of Chicago, came practically without warning, although the doctor's friends knew he would not remain in the department any longer than necessary for him to find an agreeable place. He talked the matter over with Secretary Wilson, but with no other person in the Department of Agriculture, Assistant Secretary Hays being wholly unaware of his intention until the newspapers advised him that the resignation had been tendered.

Inasmuch as Dunlap resigned before any member of the Wiley faction had any knowledge of what was coming, not one of that holier-than-thou crowd could even insinuate that the associate chemist had acted except upon his own volition. The resignation becomes effective September 15th. Dr. Dunlap left Washington the day of his resignation to attend the

International Congress of Applied Chemistry at New York, so he will not be at work in Chicago until about that date.

The doctor's retirement marks the end of the board created by Roosevelt, at the suggestion of Secretary Wilson, to pass upon questions arising under the food and drugs act. Solicitor McCabe retired after the Moss investigation, thereby allowing the Wiley contention, that the board should be composed of chemists, to be carried out. Of course Wiley and his backers found that, as a final step toward the prosecution of any man accused of violating the act, it was necessary to get the approval of the law officer of the department.

The members of the board also found that, instead of consulting with the law officer as a fellow member, they were consulting with the man whose veto was final—that is, if he cared to consult with them at all. That development simply emphasized the fact which Dr. Wiley could never seem to understand, namely, that prosecution of one accused of violating a statute is a question of law; that all a chemist could possibly do would be to furnish facts or expert opinions to back up construction of the law proposed by the lawyer.

If President Roosevelt and Secretary Wilson had recognized that fact in the first instance, there would never have been what is known as the Wiley-McCabe row. The thing for the President and the Secretary to have done the first time there was an intimation from the chief of the Bureau of Chemistry that the law was being emasculated was to have referred the question of law to the Attorney General and allow him to decide whether, under the construction likely to be placed on the act by the courts, there was any hope of obtaining a conviction. Dismissal should have followed any refusal on the part of Dr. Wiley to accept the construction by the Attorney General.

The trouble was that both Roosevelt and Wilson allowed the chief chemist to meddle with matters beyond his understanding and beyond the scope of his official authority. Now the former President is finding out, from the lips of the former chief chemist, that it was Roosevelt and not Wilson or McCabe who ruined the food and drugs act. Inasmuch, however, as they are competitors for public favor as saviors of mankind, the persons who know that Wilson, McCabe and Dunlap honestly tried to make the ambiguous pure food law workable in the way Congress intended, and not an instrument for crushing those who refused to submit to Wiley's fantastic views as to how they should run their business, are not really called upon to shed any tears. It ought to be with them a case of "Got it man; go it bear"—let them claw out each other's eyes.

As to a successor for Wiley, nobody knows anything definite. One of the bits of gossip hereabouts is that the patent medicine manufacturers upset the pot of beans so far as Dr. Beal is concerned by protesting too much that they were not interested in the question at all, but that they knew the Ohioan to be a man eminently fitted for the place. Dr. Doolittle saw the President the Saturday before the latter went to Beverly, but the word that has come from Beverly since then is that, in the opinion of the President, Doolittle is too much like Wiley and in other ways fails to fill the bill. The criticism of the scientific work of the department, by the *Scientific American*, since Dr. Doolittle became the acting head of the Bureau of Chemistry, has served to raise the query as to whether he is the man to succeed the man of whom he is a smaller edition.

Dr. Alsbery, of the Bureau of Plant Industry, the branch of the department which hesitated not to make light of Wiley's work, is now more spoken of than either of the other men mentioned. The mere fact that he was three years a student of Schmiedeberg in addition to being a graduate of the College of Physicians and Surgeons, goes a long way to give him a standing at the white house, the occupant of which believes in a thorough training for professional work of the kind that the Government needs.

Dr. Dunlap has the training and but for the political character assumed by the useless Wiley ruction, imparted by the Moss investigation, he might have remained in the Government service for many years and have done work of great worth. But with the change of administration that is likely to come next March, the fact that Dunlap got his bachelor's degree at Ann Arbor and his doctor's degree at Harvard would not have weighed against the political considerations

furnished by the demand of such an eminent scientist (!) as Moss of Indiana or some other member of the Wiley junta. If Dunlap were not then asked to resign he would have been put into a less important place with a large chunk off his salary. Dunlap is not equipped to become the proper sort of faker to mislead the women of the country into the belief that but for him they or their babies would all have been dead long ago. All he knows is to get the chemical facts upon which real progress might be based.

The fact that he had one year at Yale and had been a member of the faculties at Worcester Polytechnical and Ann Arbor would not save his salary from a cut suggested by Nelson of Wisconsin, that ridiculous member of the House, who may be recalled by the fact that he got a woman to appear before the Moss committee to denounce McCabe, the man who wrote the meat inspection statute; Dr. Melvin, who has enforced it, and Secretary Wilson, who has supervised the work as the men who had eviscerated that statute.

It was amusing to watch the former Wiley newspaper organ in this city comment upon the going of Dunlap. It said it had no doubt that his work outside the department would be fine and thereby show that what he had done here was the result of evil environment. There was not a word about Dunlap being the "traitor" who had brought the ridiculous charges against Wiley. Not a word was there about the former chief. Its utterances were stunning, until one recalls that Wiley is now handing the Ananias charge to Roosevelt and that the former Wiley organ in Washington is owned by Frank Munsey, one of the millionaires financing and otherwise operating the Bull Moose party.

The fact that President Taft has taken all the time anybody could possibly ask him to use in hunting for a man to fill Wiley's place must be taken as indicating that the chief work to be done under the food and drugs act has been accomplished. What still remains to be done is merely a following of the marks set by the food and drug board during the five years that Dunlap and McCabe were keeping Wiley from exercising a one-man power in his fantastical way, chief of which would have been the accusing of a manufacturer of violating the act and then requiring him to prove that his product was neither adulterated, misbranded nor covered by a false label.

It is a fact that the important work of perfecting a routine for the enforcement of the law has been done. What is now most needed is a chemist who is professionally capable of going upon the witness stand to prove the violations that will continue to be alleged. Dr. Wiley had not that qualification and Dr. Dunlap had never made the investigations that would have enabled him to testify as to the harmfulness of the things under suspicion.

The Government's lawyers need to be protected from another fiasco such as the Coca Cola case. The chemist hereafter who talks a Government lawyer into beginning a prosecution and then fails or refuses to put up a reasonable fight on the stand as an expert witness should be fired out of hand. If the Government cannot get chemists who can qualify as experts for the salary that is now offered, Congress should be informed on that point, so there would be no excuse for blatherskites to make capital at the expense of executive officials who, in the absence of proof, are entitled to be regarded as honest.

Just before Dunlap resigned, indictments growing out of the made-to-order everglade scandal were quashed, not because Elliott and the others proved they were not guilty of the juggling of which they stood accused, but simply because the prosecuting officer thought they had been punished enough in their dismissal. He held that, inasmuch as they had not profited by the juggling, it would be harsh to send them to trial.

The prosecutor apparently did not think of the other side of the case at all—that of the libeling of Secretary Wilson and Solicitor McCabe by the friends of the indicted men, by means of the insinuation that they were helping land sharks when the only out-and-out proof submitted in the matter was that letter written by Representative Clark which seemed to show that his righteous indignation against the everglade land sharks, if sharks they are, grew out of their refusal to go into a land deal which he suggested. Clark persuaded a majority of his constituents that he is as righteous as he claims. They renominated him for Congress, so Wilson and McCabe are the only goats, unless the men who lost their jobs may also be classed with those who brought about their dismissal.

The visiting chemists of the Congress of Applied Chemistry during their two days' visit to Washington looked into every laboratory in the city as well as went on all the sight-seeing excursions that appeal to the ordinary visitors to the capital. President Taft made a special trip to Washington from Beverly to welcome them, but he had to appear before them in a

wheeled chair, the victim of that form of rheumatism called gout. He had turned one ankle, that was sprained two years ago, on which he could not bear his weight at all, and the other was so painful that to walk on it send up his temperature to the danger point. He made his speech of welcome while seated in his invalid's chair and had to altogether cut out the garden party part of the program. The party took place, however, and the foreign guests from monarchial countries, the men who when introduced to Americans straightened up, clicked their heels together as if about to give a military salute, marveled over the simplicity of the ceremony at the home of the President, who, many of them know, has more real power than their supposedly puissant rulers.

The general public, of course, had no way of distinguishing the most humble delegate from such giants as Sir William Ramsey, Professor Bernthsen and Ludwig Knorr. All were merely chemists, whose sartorial equipment and methods of wearing the beards with which nearly all the Europeans adorned themselves, meant much more than the fact that one is the discoverer of the "noble gases," the other of anti-pyrine and the third the head of the research work of the Badische Anilin und Soda Fabrik at Ludwigshafen Am Rhein, which produced synthetic indigo in commercial quantities and atmospheric nitrogen for ordinary uses.

FOOD DERIVATIVES OF MANIOCA ROOT.

Turtle and farina, taken together, represent to those who live on the Amazon, be they white, negro or Indian, or one of the numerous cross-breeds, what the salmon does to the Alaska Indian, the cocoanut to the South Sea islander and rice to the Mongolian. A short run of salmon in the Alaska rivers, a crop failure in the paddy fields of China, a hurricane in the South Sea islands, all reduce to the same thing—famine. On the Amazon a shortage of turtles may be tided over by a plentitude of farina, or vice versa; a failure of both turtles and farina in the same year brings great and widespread distress.

Farina is a crude, locally made product of the root of the manioc, a further refinement of which results in the tapioca of commerce. Tapioca is the pure starch of the root; farina, the starch mixed with a woody fiber, the latter imparting a yellowish color to the component. Farina, under a number of different names, is more or less a staple with its natives in all of tropical America.

The methods of preparation vary slightly in different localities, but the object in view is always the same, the elimination of the juice of the manioc, which is of a highly poisonous nature. Fortunately the latter is highly soluble, and is therefore easily got rid of by washing and straining. The Brazilian apparatus for this purpose is an Indian contrivance and is in every respect similar to the one employed by the aborigines of the interior of British Guiana, from 500 to 1,000 miles from the Amazon. It consists of a long, flexible cylinder made of the hard outer skin of some cane-like plant, plaited in such a form that a longitudinal pull reduces its diameter. This, being filled with the moistened pulp of the manioc, is contracted by the attaching of a weight to a loop and its lower end, the juice being caught in pans.

A second washing and pressing renders the farina fit for eating. A rather amusing expedient is occasionally employed by the Indian women to facilitate this operation. A large hammock is suspended between the ends of two cylinders of manioc pulp, and into this are thrown a half-dozen or more of the first children to come to hand, the edges of the hammock being then knotted together above the struggling prisoners. Whether the youngsters take their confinement in good part or otherwise, they at least never take it quietly, the ensuing struggles squeezing the manioc dry in a fraction of the time in which it would have been accomplished by the application of a dead weight.

A remarkable thing about this juice of the manioc is that though it contains so large a quantity of prussic acid that it is invariably fatal to a man, or even dog or cow that happens to drink it, the addition of certain herbs known to the Indian renders it perfectly harmless and admirably suited to the making of sauces and seasonings for fish and turtle.

WHO WOULDN'T LIVE IN WEBSTER CITY?

For its annual festival to be held on September 16th, known as Watermelon Day, Webster City, Iowa, has purchased in Chelsea about 3,000 watermelons, guaranteed to be the best on the market. A part of the contract made is that the melons are to be in time for the festival, with a tracer after them from the minute they leave Chelsea. This precaution is taken owing to the fact that last year the melons did not arrive on schedule time and caused much worry to the committee.

The Law and the Food Manufacturer

An Opinion on the Saccharin Decisions.

In response to an inquiry by the Monsanto Chemical Works, in regard to the standing of the various decisions rendered by the Board of Food and Drug Inspection on saccharin, Warwick M. Hough, an attorney of St. Louis, has written the following opinion:

"The Board of Food and Drug Inspection has no authority to modify a regulation which has been made by the three secretaries. Therefore, if Food Inspection Decision No. 146 is to be interpreted as narrowing the provisions of Food Inspection Decision No. 142, it is without force and effect.

"The food and drugs act provides that the term 'drug' as used in the act shall include, in addition to medicines and preparations recognized in the United States Pharmacopoeia or National Formulary for internal or external use, any substance or mixtures of substances *intended to be used* for the cure, mitigation or prevention of disease of either man or other animals.

"Under this provision the Board of Food and Drug Inspection has ruled that a substance which would otherwise be classed as a food, and be subject to the provisions of the law relating to foods, is to be regarded as a drug, and subject to the provisions of the law relating to drugs, if its label bears a statement that it is intended to be used for either the (1) cure, (2) mitigation or (3) prevention of disease.

"Therefore, under the law and the valid regulations, when any substance is sold under a label indicating that it has been prepared for the purpose of avoiding or mitigating any disease, it is to be judged by those provisions of the law which relate to drugs, and not to those provisions of the law which relate to foods.

"Food Inspection Decision No. 142 distinctly declares that that decision was not intended to interfere in any manner with this use of saccharin.

"Consequently, if *any substance whatever* is sold under a label which states that such substance was sweetened with saccharin for the benefit of those to whom sugar is harmful or deleterious, the sale of such product cannot be lawfully interfered with, as it might be under the regulations, if the package bore the simple statement that the product contained saccharin, without any additional statement as to the purpose for which the manufacturer used saccharin.

"The number of people in the United States to whom the use of sugar, either alone or in connection with other substances, is deleterious or dangerous is enormous, and it is absurd to say that the Department of Agriculture can rule that *some* people can sweeten *some* of their foods with saccharin for the purpose of mitigating or preventing disease (diabetes), but that they cannot use it in *all* of their foods for the same purpose, or that *all* of the people who so desire cannot use it for such purpose, even in *some* of their foods.

"The Referee Board of Consulting Scientific Experts holds in its supplemental report that saccharin in quantities in which its use as a sweetener in food is practical is not a poisonous or deleterious ingredient within the meaning of those terms as used in the food and drugs act.

"Under such a finding there should be no interference with the right of any food manufacturer to use saccharin in the preparation of his foods without any declaration upon the label whatsoever.

"It is true that the Referee Board found that saccharin in very large quantities, if used daily for many months, was liable to create disturbance of the digestion; but this much can be said against any substance or any food.

"The Referee Board stated further that inasmuch as sugar has a food value, and saccharin has none, the use of saccharin in the place of sugar should be carefully safeguarded. They did not indicate *how* it should be safeguarded, but it is perfectly obvious that a declaration upon the label that the article has been sweetened with saccharin, and not with sugar safeguards its use as effectively as possible.

"Thus, under the law and the report of the Referee Board, no other statement should have been required upon the label when saccharin is used other than the statement that it had been used and not sugar.

"While the three secretaries went further than this, and ruled in Food Inspection Decision No. 142, that when saccharin is used, the label should show that the article is *intended* for the use of those persons who, on account of disease, or for the mitigation of disease, or for the prevention

of disease, must abstain from the use of sugar, it is perfectly obvious that it is illogical, as well as improper, for the Board of Food and Drug Inspection to attempt to place a limitation upon such use.

"It must, therefore, rest entirely with the manufacturer as to how much of such a product he desires to prepare for the market and take his chances of selling.

"As a matter of fact, there is nothing whatever involved in the use of saccharin except a commercial controversy between the sugar trust on the one hand and the manufacturer of saccharin on the other hand.

"The use of saccharin necessarily cuts into the sugar profits, and it is to be expected that its use will grow, so as to cut still deeper into sugar profits. Under the circumstances, it is quite natural that the sugar people should leave no stone unturned in their efforts to throttle such a competitor.

"They have been fortunate in securing the violent activities of Dr. Wiley in their behalf, but it is only the official position which he occupied for so long which gives strength to his many unscientific and commercial statements on the subject.

"As long as the controversy can be extended, many manufacturers and packers will be intimidated from using saccharin, with corresponding profits to the sugar trust. In time, however, the public will learn how they have been lincensed on this as well as some other subjects, and the saccharin manufacturers will come into their own."

Proposed New Drug Act for Missouri.

Secretary Frank E. Long, secretary of the St. Joseph (Missouri) Retail Druggists' Association, sends out copies of a bill his association supports by resolution covering the practice of pharmacy in Missouri that the legislature of Missouri will be asked to pass. The bill embodies many proposals such as the American Medical Association has endorsed, and which the Proprietary Association of America has fought as obnoxious. It provides among other things:

"Section 4. That it shall be unlawful for any person to manufacture within the state of Missouri any drug which is adulterated or misbranded, or which contains any poisonous or deleterious substance within the meaning of this act.

"Section 5. That it shall be unlawful for any person to sell, keep for sale or offer for sale, barter or exchange, within the state of Missouri, any drug which is adulterated or misbranded, or which contains any poisonous or deleterious substance within the meaning of this act; or if the labels or any advertisement, poster, circular, catalogue, price list or other means of publicity contain any false or misleading claims or representations relative to diseases or symptoms of disease; or if any false statement of any fact concerning its curative or remedial property be made or promulgated in any manner.

"Section 6. That every package, box or bottle of drugs or medicines for either internal or external use, by man or other animals, and substance or mixture of substances, intended to be used for the cure, mitigation or prevention of disease; also cosmetics, hair preparations and dyes, and all medicinal toilet preparations when containing any of the following ingredients, to-wit: Acetanilid, antipyrin, acetphenetidin, anesthesin, alcohol, aspirin, alpha and beta eucain, arsenic, carbolic acid, chloroform, chloral, cocain, croton oil, cannabis, heroin, holocain, lead salts, morphine, mercury salts (except calomel, movocain, opium, othoform, phenacetin, theobromin, trional, sunfonal, stovain, strychnine, zeronal, cotton root, ergot, pennyroyal, rue, savin, tansy or any compound or preparation or derivative of any of the foregoing shall be so labeled and shall bear upon the main label a statement of the quantity or proportion of the same contained therein. Provided that the provisions of this section shall not apply to bona fide prescriptions of licensed practitioners of medicine or dental surgery and veterinary surgeons in the course of their personal practice, nor to such drugs and preparations as are officially recognized in the United States Pharmacopoeia or the National Formulary and which are sold under the name by which they are recognized.

"Section 7. No person, other than a registered pharmacist, or a registered assistant pharmacist under the supervision of a registered pharmacist, shall compound or manufacture any drugs or medicine containing any of the substances enumerated in section 6 or their derivatives or preparations, or

any medicinal preparation for either internal or external use by man or other animals, or any medicinal toilet preparation.

"Section 8. No person, other than a registered pharmacist, or a registered assistant pharmacist under the supervision of a registered pharmacist, shall offer for sale, or sell direct to the customer, or at retail, any drug or medicine containing any of the substances enumerated in Section 6 or their derivatives or preparations, or any medicinal preparations for either internal or external use by man or other animals, or any medicinal toilet preparation. Provided, that nothing contained in this section shall be construed to repeal in any manner, any act or acts, which may now restrict the trafficking in or the sale of coco leaves, opium, cocaine and morphine and their derivatives."

There is a provision also exempting from the operation of the law the manufacture of spirituous, vinous or malt liquors.

A British Flour Bleaching Decision.

In the sheriff court at Hamilton, Scotland, recently the sheriff gave judgment in the prosecution against the Uddingston Co-operative Society for selling as genuine flour which had been subjected to a process of bleaching.

The complaint was to the effect that the flour was not genuine in respect that it had been bleached by peroxide of nitrogen, a poisonous noxious gas.

The sheriff held that the charge had not been made out, and that the complainers could not prove that the sample of flour in question had caused injury to health, or that it was flour which was not capable of being used with apparently satisfactory results for the purposes for which flour was employed.

Some buyers no doubt knew when purchasing that flour had been bleached; others, again, had a suspicion it had been so treated, but this lordship fancied the majority of people neither knew nor cared so long as the flour served the purpose. As a result of the evidence, it must be taken commercially bleached flours could not be proved to be different in their essential characteristics from unbleached flours.

As to the baking tests, the evidence of practical bakers was quite inconclusive. They did not establish that certain undesirable results always attended the use of bleached flour. No doubt the obvious explanation was that if this were so, bleached flour would certainly lose its market.

It was shown that different parts of the country had different tastes in the matter of whiteness. Some preferred a dead white and others had a liking for the natural creamy color, but it was futile to suggest that color was the only test.

Both the baker and the housewife bought their flour mainly from experience of its qualities as brought out in the baking, and they would not sacrifice these merely for color. If the millers attempted to palm off an inferior flour on the customers they would soon be found out. Even the ordinary housewife would not go on buying flour which did not please her, and there was sufficient competition to insure that the price of flour would in the long run depend on its baking qualities.

The sheriff said he was satisfied the miller's object in bleaching was to meet the tastes of his customers with respect to color. So long as the nature, substance or quality of the flour were not affected, there was no law against the miller bleaching. In the whole circumstances he must hold that the complaint was based on apprehended evils rather than on proved deterioration.

Frankly speaking, he sympathized with the spirit which induced the prosecution, and possibly its purpose might to some extent have been affected by the resultant publicity; but, nevertheless, he came without any hesitation to the conclusion that the contravention had not been proved.

Verdict Against Hall-Baker Grain Co. Reversed.

In the United States Circuit Court of Appeals at St. Louis a decree was handed down this week reversing a verdict against the Hall-Baker Grain Company of Kansas City, Missouri, given by the United States Circuit Court in Kansas City, April 3, 1909, under the operation of the pure food law, charging the Hall-Baker Grain Company with having misbranded wheat. It was during the pendency of this case that the Board of Food and Drug Inspection, then headed by Dr. Wiley, made its famous tentative decision forbidding the so-called practice of misbranding grain by shipping grain off-grade, and against the treatment of oats by sulphur dioxide.

The judge's decree reversing the lower court's ruling was no evidence to convict the Hall-Baker Company of a violation of the pure food law.

The case was based upon the sales of a car of No. 2 red wheat to the Walker Grain Company of Fort Worth, Texas.

The evidence that the Hall-Baker Company properly had instructed a St. Louis elevator company to ship 5,000 bushels of No. 2 red wheat to the Texas concern, and a car of wheat thus graded under the Missouri inspection was shipped. On its arrival at Fort Worth the Texas inspector pronounced it to be mixed wheat, and the Walker Grain Company brought suit and obtained a verdict.

The court holds that the Hall-Baker Company acted in good faith and had a right to believe that the grading of the state inspectors would be correct. The opinion says that the food and drugs act was not enacted to trap business men who are following the regular customs and practices in their lines of trade when such practices themselves are not founded on fraud and deception.

Provisions of the Sherley Act.

The Sherley act, recently approved by the President as an amendment to the Federal food and drugs act of June 30, 1906, provides that any drug shall be deemed to be misbranded:

"If its package or label shall bear any statement, design or device regarding the curative or therapeutic effect of such article which is false and fraudulent."

When the pure food and drug law was enacted it was supposed that it contained such a provision. But the Supreme Court in a divided opinion and with Justice Hughes heading the dissenters decided that the law does not prevent misrepresentation of the cures which a drug is said to effect. This decision defeated the efforts of the government to drive Johnson's cancer cure from the market.

MEAT PACKERS TO MEET IN CHICAGO.

The American Meat Packers' Association will hold its annual convention in Chicago October 14, 15 and 16. This has been announced by Benjamin W. Corcoran, president of the organization, who also announced the appointment of chairmen of the various committees. Those appointed were:

Business Committee—George L. McCarthy of New York City.

Entertainment—Barney Brennan of the Brennan Packing Company of Chicago.

Banquet—James S. Agar of the Western Packing and Provision Company.

Press—Edward S. Labart of Morris & Company.

In a special bulletin Chairman McCarthy of the business committee stated that the convention as originally arranged had to be postponed because of the inability to select suitable quarters on account of political activity in Chicago crowding the hotels.

All the business events will take place at the Hotel Sherman. A place for the holding of the entertainments on the program is to be selected later.

Among those on the banquet committee are John Roberts, E. B. Merritt, A. D. White, Oscar F. Mayer, R. B. Hunter, D. S. Colbert and Harry Boore.

BREWMASTERS' ASSOCIATION CONVENTION.

The annual convention of the United States Brewmasters' Association will be held at Cleveland, Ohio, September 16th to 18th.

On Sunday, September 15th, at 8 P. M., there will be a reception at headquarters, Gray's Armory Hall. Monday morning at 8 A. M. the registration will begin and the Board of Trustees will hold a meeting. Session of the convention will be held at 10 A. M. and 2 P. M. At 8 P. M. there will be a commers, with ladies.

The business sessions of the convention will continue at 9 A. M. and 2 P. M. on Tuesday, September 17th. At 8 P. M. there is to be a dance.

An excursion on Lake Erie at 10 A. M. Wednesday, the 18th, will conclude the entertainment. In addition there will be a shopping tour at 2 P. M. Monday and a theater party at 2 P. M. Tuesday.

NO INEDIBLE MATERIALS IN CARS.

The shipping of inedible meat products in the same cars with edible products is prohibited by the Federal meat inspection service, and no objectionable inedible material of any kind can be placed in cars with meat. The notice to inspectors says:

"No inedible material which is objectionable shall be placed in cars with meat or meat food product. Furthermore, no inedible meat or meat food products shall be placed with meat or meat food product in cars bearing government seals."

Household Science and the Table

FALL FRUITS IN VARIETY.

By Elenora E. Reber.

The late summer and fall contribute a greater variety of common fruits than any other season of the year, and during the month of September our tables may be graced with peaches, pears, plums, apples, grapes, quince and perhaps some of the late berries. All of these fruits, with the single exception of the quince, may be eaten in their fresh raw state, but they also, without exception, are used largely for preserving in various ways, whole and crushed, pickled, canned, etc. Tree fruits are on the whole less perishable than the smaller fruits, and may be kept in storage for a considerable length of time if gathered at the proper stage, and placed where a low temperature prevails, and the atmospheric conditions are not conducive to decay. Pears, especially, are a fruit that develop a very fine flavor under artificial ripening, and when so treated are considered by many of even better flavor than the tree ripened fruit which is so easily left hanging too long.

Fruits, either fresh or preserved, must not be counted as a luxury, but rather as a necessity, and indeed in these days

more and more people are coming to recognize their food value to a greater degree. Available statistics show that fruits constitute a by no means unimportant part of the diet of the American people, and they supply to us nearly five per cent of the total food and about four per cent of the total carbohydrates of the food supply of the average family of this country. It has been amply demonstrated that a fruit and nut diet will maintain health and strength of an individual indefinitely.

So far as can be learned comparatively few investigations have been made to ascertain the digestibility of particular fruits, raw or cooked, or to determine the ease or rapidity of digestion of different fruits in the stomach. However, a comparison of available data indicates that fruits compare favorably with other common foods as regards stomach digestion.

One investigator found that sour apples eaten uncooked require two hours for digestion in the stomach and mellow, sweet apples one and one-half hours. Another observer notes that about five ounces of raw ripe apple requires three hours and ten minutes for digestion in the stomach, but states that if the fruit is unripe, and consequently contains a high proportion of cellulose, a much longer time may be required.

The temperature at which fresh fruits are eaten is largely a matter of fashion and individual taste. With the increased use of ice in our homes during recent years it has become a very common custom to serve fruits colder than was formerly the case. Cool or even cold fruits are refreshing and many prefer them served thus. There are others, however, who maintain that overchilling lessens the delicate flavor and accentuates the acid taste. They insist that fruits gathered in the cool of the day and stored in a cool but not a cold place are best. Still others find them sweetest and most palatable when brought from the orchard warmed by the sun, an ideal method not possible away from the orchard.

"As is the case with all vegetable foods, the heat of cooking breaks down the carbohydrate walls of the cells which make

up the fruit flesh, either because the moisture or other cell contents expands and ruptures the walls or because the cell wall is softened or dissolved," says a Government bulletin which discusses the cooking of fruits and its effect. "Texture, appearance and flavor of fruit are materially modified by cooking, and if thorough it insures sterilization, as in the case of all other foods. The change in texture often has a practical advantage, since it implies the softening of the fruit flesh so that it is more palatable and may be more readily acted upon by the digestive juices. This is obviously of more importance with fruits like the quince, which is so hard that it is unpalatable raw, than it is with soft fruits. When fruits are cooked without the addition of water and other material, as is often the case in baking apples, there is a loss of weight owing to the evaporation of water, and the juice as it runs out carries some carbohydrates and other soluble constituents with it, but under ordinary household conditions this does not imply waste, as the juice which cooks out from fruit is usually eaten as well as the pulp. Cooking in water extracts some of the nutritive material present. Thus a German investigator found that after boiling, apples and pears contained four or

five per cent and peaches about seven per cent less carbohydrates than the uncooked fruit. In this case also such removal of nutritive material is of no practical importance.

"The idea is quite generally held that cooking fruit changes its acid content, acid being sometimes increased and sometimes decreased by the cooking process. It is often noted that cooked fruits, such as plums, seem much sourer than the raw fruit, and it has been suggested that either the acid was increased or the sugar was decreased by the cooking process. This problem was studied by Sutherst, and in his opinion the increased acid flavor is due to the fact that cooked fruit of many varieties usually contains the skin, which is commonly rejected if the fruit is eaten raw. As regards the effect of

cooking on the kind and amount of sugar present, uncooked gooseberries were found to contain 1.2 per cent cane sugar and 5.8 per cent invert sugar. After boiling no cane sugar was found, while the invert sugar amounted to 6.9 per cent. This indicates that all the sugar undergoes inversion during cooking, the acid present bringing about the inversion in the usual way.

"When fruits are used for making pies, puddings, etc., the nutritive value of the dish is, of course, increased by the addition of flour, sugar, etc., and the dish as a whole may constitute a better balanced food than the fruit alone. It is commonly believed that dishes in which fruits are cooked with the addition of sugar, butter and flour crust of some sort are less easily digested than simple rations of bread, butter and fruit having an equivalent of nutritive value. The large number of digestion experiments which have been made with various mixed diets do not indicate, however, that there is any special difference between the two rations as regards thoroughness of digestion."

Not all countries share the opinion with Americans that raw fruit is more wholesome than cooked, and certainly by most people is here eaten with greater relish when fresh. For instance the Germans use comparatively little raw fruit and



IT MAY BE A MATTER OF PARDONABLE PRIDE TO AMERICANS THAT IN GREAT FRUIT-RAISING SECTIONS EVERY EFFORT IS MADE NOT ONLY TO KEEP THE FRUIT, BUT THE TREES ON WHICH IT GROWS, CLEAN AND UNSPOTTED.

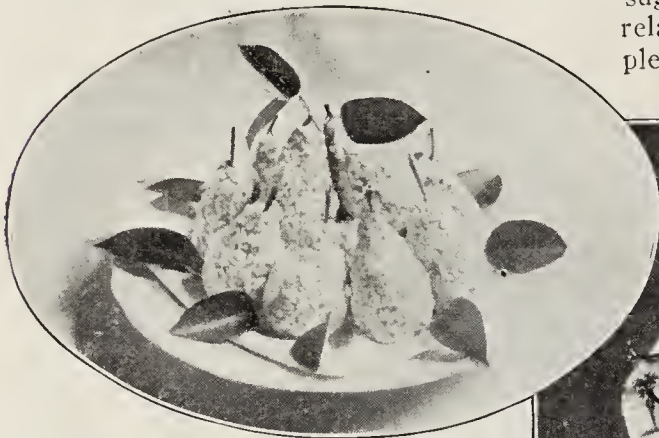
consider it less wholesome than the cooked. It has been suggested that the European prejudice against raw fruit may be an unconscious protest against the unsanitary methods of handling and marketing their product and the recognition of cooking as a practical method of preventing the spread of disease by fruit accidentally soiled in field or market place. It may be a matter of pardonable pride to Americans that in the great fruit raising sections, especially, every effort is made to keep not only the fruit, but the trees on which it grows, clean and unspotted. In those orchards where the product is intended for sale in the city markets, and the industry is conducted on a large scale, the roads are sprinkled and kept as nearly dustless as possible, in order to keep the fruit on the trees clean. Then before packing each specimen is washed or brushed as the case may be and subsequently wrapped in tissue paper, so there should not be much danger from eating such fruit by consumers in this country. At the same time housewives should, as an extra precaution, wash all fruit before cooking or serving raw.

In preparing such fruits as plums, peaches, etc., for the table, the skin may be readily removed, without injury to the flavor by first immersing them for a short time in boiling hot water. A silver knife should always be used for paring apples, pears, and other fruits, as if a steel knife is used the acid of the fruit acts on the iron of the knife and frequently causes a black discoloration, and there is also very commonly a noticeable metallic flavor from the steel knife.

THE PEAR.

The pear has many claims to our regard, and is a fruit that agrees with most people. It is nutritious and holds more

sugar than its relative the apple, and its sug-



PEAR CROQUETTES.

ar is in a form immediately assimilable by the digestive tract in any part. Thus the vessels of the mouth absorb some of it and pass it straight into the blood; it has to undergo no further change, and needs to be acted upon by no digestive fluid. The pear runs the apple closely in the quantity of salts it shows, but in acid it is deficient. Its acid is certainly the same healthful malic of which the apple's acid is the type, but it has only a tenth as much of this as an apple has. Hence, as a helper of digestive processes, the pear for dessert, luscious as it is, cannot compare with the apple.

September is pre-eminently the month of pears, and while the fruit does not lend itself to as great a variety of uses as the apple, there are sufficient number of ways of preparing them to satisfy the ordinary housewife. Here are three English recipes that are recommended as exceedingly fine:

SUEDOISE OF PEARS.

Pare, cut in halves and core a dozen cooking pears (keep the best one whole for the center) rub with lemon juice to preserve the whiteness, cook in a light syrup and drain on a hair-sieve; cut a large, four-inch high, cork-shaped piece of bread and two dozen thin, pear sized slices, fry them in butter, make the large one fast with a little marmalade on the center of the dish, put each half pear upon the small slices, and pile in two rows around the center one, reduce syrup, pour it over the pears, blanch a few almonds chopped fine, and throw over the pears and serve.

POIRES A LA MARQUISE.

Take a quart of white pears preserved whole, heat in a saucepan and drain on a sieve, and reduce the syrup with two glasses of Maraschino; cook a pint of rice with a quart of milk, two ounces of sugar, the rind of a lemon chopped fine, and a little butter; this done, add four yolks of eggs, mix well with the rice, etc., and fill a well buttered flat mold, press down gently, turn on a silver dish, range the pears on the border, and fill the center with sweetened whipped cream, pour reduced syrup around the base and serve.

CHARLOTTE DE POIRES.

Line the bottom of a plain, copper charlotte mold with a round thin slice of bread notched on one side, and dip that side in luke warm clarified butter; line the sides with the same, similarly prepared, the slices being an inch wide, placed perpendicularly, and reaching to the top, with the notched sides against the mold. Let the slices overlap each other slightly. Cut in slices some ripe pears, stir on the fire with a wooden spoon until very stiff, add a little sugar and let cool slightly. Then fill the prepared charlotte mold with the pears, cover with another round slice of bread also dipped in butter, put in a baking pan, cover the charlotte, and cook in a fairly hot oven twenty minutes; when done turn into a silver dish and let stand a while with the mold. Have a sauce made with the syrup of the pears reduced with half a pint of apricot jam, pour some of this around the charlotte, sprinkle the top with sugar, and serve with the remainder of the sauce in a sauceboat.

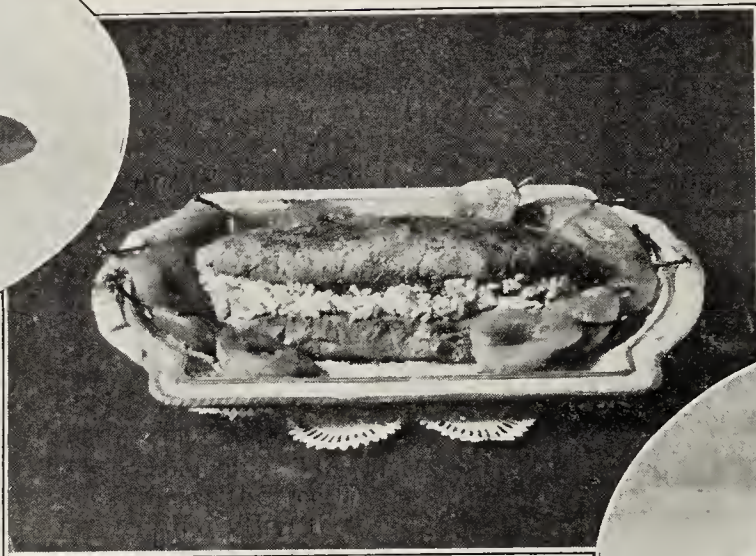
PEAR CROQUETTES.

Pare ripe solid fruit, core at the blossom end and steam until tender; then stuff hollow with Maraschino cherries, or chopped figs; cover with cooked rice, season with butter and salt. Serve cold with a lemon sauce.

THE QUINCE.

While quinces will keep for weeks in a cool place, they must be picked before the frost touches them, as the gelatinous principle and the flavor are injured by even slight frost bites, says one who speaks with a tone of authority on this fruit. All of the varieties of quince have the rich peculiar flavor belonging to this fruit, and a hard, firm flesh that requires long cooking to make it palatable. The fireless cooker can be used to great advantage in quince cookery, for there is no danger of burning and no need of stirring to break up the fruit.

No part of the quince needs to be thrown away, further declares this authority, the cores and parings should always be simmered a long time in water, which, after straining, is added to the fruit for further cooking. As there is actually no



RICE OMELETTE WITH PEARS.

waste the quince is an inexpensive fruit. As soon as pared and quartered the fruit should be dropped into cold water to prevent discoloration. Cooking until tender will make the quince amber colored, while longer cooking, especially with sugar, will give a rich red color.



CENTERPIECE OF FALL FRUIT.

QUINCE HONEY.

One adept in quince cookery is delighted with a quince honey which she made last season and declares it to be "the best of sweet sweets." Her recipe is as follows:

Pare the fruit, then grate; have prepared a syrup of white granulated sugar; into this boiling syrup stir the grated quince; boil until the pulp will remain through the syrup and not sink to the bottom of the mixture, watching closely that it does not scorch. A wooden paddle is just the thing to use in stirring the honey, though it is better not to stir too often or the "grain" will be destroyed. An average sized quince and a cupful of granulated sugar, dissolved in half as much water will make a small jellyglass of honey. The honey may be placed in jelly glasses or in glass cans.

Save the parings and cores, cover with cold water, cook until soft, strain through a cheesecloth bag. To each pint of juice add one pound of white sugar; boil the juice ten minutes before adding the sugar; boil hard until it jellies, which usually requires about ten minutes; empty into jelly molds

and you will have half as much jelly as honey from the same fruit.

QUINCE PRESERVES.

The distinctive features about this recipe is that the preserves are slightly flavored with orange. Pare, core and cut in eighths a quantity of quinces. Simmer the cores and parings in water to cover for about three hours and strain. While these are cooking, put the quince and two oranges, washed, sliced very thin and freed from seeds into a saucepan with water to cover. Or put into a covered baking dish and bake slowly until tender. Allow two cupfuls of sugar to each pound of fruit and add to the water strained from the parings. Cook five minutes, add the quince and orange, and simmer slowly for one hour. Put in small jars and seal.

BAKED QUINCES.

Wash, core and pare the quinces and set in baking dish with water to nearly cover. Fill the centers with sugar and bake slowly until the quince is tender but not broken. Serve a little of the syrup with each portion and a spoonful of whipped cream on top. Instead of the cream one may put on a piece of butter, but the quince seems to need either cream or butter for seasoning.

QUINCE PUFF.

Pare and slice six medium tart apples and one large quince, place in a saucepan with a half cupful of cold water. Cover and cook slowly one-half hour. Press through a colander, return to the fire and add the yolks of three eggs beaten with a half-cupful of sugar. Cook a few moments, then when cool stir in the frothed white of the eggs. Serve cold.

THE GRAPE.

Among the most plentiful and cheapest of our native fruits is the grape in its many varieties, which may be prepared in various ways for winter consumption. Choice, sound fruit must always be selected, granulated sugar used and porcelain-lined, agate or earthen vessels and wooden or agate spoons must be used in the entire process of cooking them. Wild grapes are considered by many even better than the cultivated varieties for making jelly and grape juice. If the wild fruit is used for making jelly, remember that it is very sour and will require a pound and a half of sugar to the pint of juice, whereas the cultivated grape needs but a pound, or at most a pound and a quarter.

GRAPE JELLY.

To make grape jelly to perfection gather the fruit when it is not quite ripe and use as soon as possible after picking. Remove the fruit from the stems, rejecting any berries that are imperfect; wash quickly in cold water, place in a double boiler, cover and boil slowly for an hour. Strain through a jelly bag without squeezing. Place the sugar in the oven to heat on platters or in a biscuit pan for fifteen minutes and boil the juice uncovered for twenty minutes. Turn in the hot sugar, stir until dissolved and boil together for three minutes. Test quickly and if it does not "jell" boil three minutes longer. Pour into tumblers and let them stand twenty-four hours before sealing. Seal securely and store in a cool, dry place.

GRAPE SYRUP.

Catawba grapes are recommended for this syrup. Mash the fruit thoroughly and let the pulp stand in an earthen crock four days in a warm place. Then put in a jelly bag to drip over night. To each pint of juice allow two pounds of sugar and cook together in a double boiler. As soon as the syrup is hot and the sugar all dissolved remove from the fire, and when cold bottle and cork. This syrup makes a delicious flavoring for ices, sauces and beverages.

SPICED PEACHES.

Take large yellow peaches, peel them evenly and allow for eight pounds of peaches, four pounds of sugar, one pint white vinegar, one-half ounce whole cloves, one-half ounce whole cinnamon, one-half ounce whole mace. Sew the spice, except the cloves, in three small muslin bags and stick the cloves into the peaches, dividing them equally. Place the sugar and vinegar in a preserving kettle over the fire, and stir until the sugar is dissolved. As soon as it boils put in as many peaches as will conveniently lie in the syrup without crowding, boil the peaches until a straw will pierce through them easily (but do not allow them to break), take them out carefully and put them in a stone jar. Have the jar standing on the stove alongside the preserving kettle. Put more peaches into the syrup and boil the same way. Continue until all are boiled, then pour the syrup over, lay the spice bags on top and set aside. When cold cut a round piece of tissue or

manila paper to fit in the top of the jar, lay the paper over the peaches, fit it in neatly and pour either a little brandy or vinegar over the paper; brush a piece of brown paper all over with the beaten white of an egg and paste it over the jar, then tie some more paper over, and set in a cool place. Or the peaches may be put in glass jars.

PEACH SWEETMEATS.

Take eight pounds of peaches, six pounds of sugar, pare the peaches, put them in layers with the sugar in a bowl, cover and let stand over night. Next day put them over a slow fire and boil till it drops from the spoon; stir often to keep from burning and carefully remove scum as it rises. It will be necessary to boil it from one and a half to two hours. Place in a stone or glass jar, cover with brandied paper, close tightly, and keep in a cool, dry place for future use.

BOTTLING FRUIT.

The fruit bottled must be just ripe and not bruised in any way. If it be at all dusty or begrimed it should be washed in clean, cold water very gently. Large fruits, such as pears, require peeling before being bottled; all large fruits—pears, apples, peaches, apricots and so on—must be halved and cored or stoned. For this purpose use only a silver knife.

Have the jars perfectly dry and clean before using. Pack the fruit in tidily, as closely together as possible, fill up with cold water and stopper securely. Place the filled bottles in a large preserving pan, fill up with cold water—so that the bottles are quite covered—and bring the water to the required heat. Afterward remove the pan from the gas and let it become fairly cool before taking out the bottles. When cool take out the bottles, wipe them and let them become cold, then store in a dry, dark, cool place.

Plums of all kinds should be brought to 185 degrees Fahrenheit and be cooked for twenty minutes afterward; apricots, peaches, nectarines and cherries require cooking for a like time, after reaching 194 degrees Fahrenheit. Strawberries, raspberries, blackberries, red and white currants should be cooked for half an hour in water at a heat of 167 degrees Fahrenheit, while apples and pears of most varieties should have the water brought to 212 degrees Fahrenheit, and then be cooled from twenty minutes to an hour, according to the variety. It is hardly necessary to point out that only fruits requiring the same heat can be bottled at the same time; thus you can not bottle plums and apples at the same time—at least not with happy results.

THE NATIONAL DAIRY SHOW AT THE STATE FAIRS.

This year the National Dairy Show will have a tent at all of the state fairs, east and west, that movement from one to the other will permit. In this tent will be found at lunch time a bit of refreshment for the weary dairyman and the representative in charge will have on hand premium lists and entry blanks and wherever the tent may be the dairy cattleman or farmer seeking information about this great national show will be extended a most hearty welcome.

A splendid classification and set of rules has been prepared, from which all prospective exhibitors may see that the show is being built on lines of most useful purposes. This insures that a ribbon won at the show carries with it the highest prestige of the year in show yard honors. Extending the premiums over six possible winnings makes it cover opportunity for the great herds of the year and the smallest breeder or beginner to achieve national recognition with meritorious animals. The judges selected by the state fairs are always men of national repute and their placing of the animals brought before them is watched with sportsman's interest, so that by the time the exclusively dairy shows are reached, interest is at a red-hot heat and then the coming together of the contestants at all of the fairs, east, west, north and south, brings the white heat period and the fur flies for fair.

With the immense crops of hay and grain in prospect for this year and the general shortage of live stock of all kinds upon the farms of America, everyone interested in dairy cattle or in the industry in any manner should make their plans now to attend the National Dairy Show at Chicago this year and present to the world the most convincing argument any industry can advance—namely, a solid front. At this show will be the attainments of the breeders' work of years, the highest achievement of genius in methods of simplifying the machinery used in dairying, and all that the mind of man has evolved on educational lines for the benefit of the farmer and dairyman.

The National Dairy Show will be held from October 24th to November 2nd at International Amphitheatre, Chicago.

Survey of the Food and Drug World

Our Important Dairy States.

The last figures furnished by the Department of Agriculture from the United States Census Bureau on numbers of dairy cows in each state is very interesting, when one considers the claims made by different states as to the figure they put in the dairy industry, according to the publicity man of the National Dairy Show Association.

New York has set back in a sort of never-can-reach-me kind of way, assured apparently that she occupied first place in dairy doings, but let's stop and see who is getting dangerously close. New York is given credit in the government figures of having 1,508,672 cows and 438,124 calves, while Wisconsin is shown to have 1,471,591 cows and 449,489 calves, just 36,081 cows under the Empire state and 11,365 calves over. It would look very much as though Wisconsin's claims to have already wrested the honor of premier place from New York in the *Dairy World* were well founded. Taking facilities for securing data in the two states into consideration, one can readily see that the figures of product output set forth by Wisconsin are backed by this showing of cattle and about entitle the Badger state to first honors.

And now comes Iowa, giving a close chase for second place with 1,404,419 cows and 567,991 calves, with only 104,253 cows behind New York and an increase in calves of 29,867. Iowa takes the high percentage of increase in breeding and will be giving the leaders trouble if they don't move fast. Minnesota and Illinois loom up in the million cattle class with great speed on. In glancing over these figures one wonders really if little old New York reads the papers or if she is so wrapped up in her own affairs that she, like the fly on the wheel, comments on the dust she is making and lets it go at that.

Cost of Living in Germany.

In Germany, according to a consular report, vegetables and meat can hardly be purchased by the workman's family. The high price of bread also continues. The barns are filled with the crops of a good harvest and yet the prices of staple products are no lower. The price of meat has gone up within the last few weeks in many cities, Dresden included, about 10 per cent, without any hope of its growing cheaper. Attempts made by various city authorities to supply sea fish and other meat at reduced prices for the masses have met with little success. In order to accomplish anything in this direction it is said that more means would have to be supplied. It is claimed that the high prices are caused largely by brokers. Investigation, however, on this point proves that too little consideration for the risks and expenses of the brokers has been shown.

In other ways the increased price of living is noticeable. The savings bank accounts show a perceptible falling off in this year compared with former years, a difference between \$14,280,000 and \$16,660,000. Perhaps savings are not less, but owing to higher prices people are forced to put their principal out at a higher rate of interest in order to meet the demands of present living expenses.

Olive Oil Prospects.

Consul William Dulany Hunter of Nice reports, under date of July 25, that the outlook for the olive crop in that district of France is favorable, the young fruit having developed satisfactorily. Although the crop in the maritime Alps is expected to be good, the price of olive oil is firm, as reports of the crop in other districts are less favorable.

Consul Edward J. Norton of Malaga reports, under date of July 29, that olives are in a fairly satisfactory condition in the eastern Andalusia district of Spain, although the production of oil in some districts will be very light because of lack of spring rains. The tendency in the oil market is toward an advance in prices.

Vice Consul Alden March of Leghorn, Italy, reports under date of August 1 that the prospects are that the olive crop in Tuscany may be one-half the average production, if all continues to go well. In some districts there is fear of damage by the olive fly.

Candy and Ice Cream Show.

The International Baking, Candy and Ice Cream Exhibit will open Monday, November 4, and close Saturday night, November 9, at Madison Square Garden, New York.

It will be under the auspices of the New York State Association of Master Bakers and Confectioners and Ice Cream

Manufacturers' Protective Association of New York State, and will embrace all machinery, tools, utensils, raw and manufactured products, which are used in the baking, candy, ice cream and soda water trades.

The chief object of the exhibit is to acquaint the public with modern conditions in the baking, confectionery, soda water and ice cream manufacturing trades, to exploit the wholesomeness and purity of their products, and the sanitary conditions under which they are made, thereby destroying unwarranted prejudices, in part created by recent pure food agitation and blindly opposed to pure as well as impure food products.

A complete candy manufacturing plant showing the various operations of turning sugar and chocolate into dainty and delicious hard candies, as well as chocolate.

Cranberry Crop to Be Large.

The cranberry commercial specialists have tabulated their preliminary work for this season. They estimate a production of 470,000 barrels. Of this quantity 300,000 barrels are expected from Cape Cod, 125,000 barrels from New Jersey and 45,000 barrels from Wisconsin. The estimate exceeds last year's product by 24,000 barrels. The crops of both years were below normal on account of having been cut short by cold and late springs. The record crop was 568,000 barrels in 1909. The promises are for an exceptionally fine quality of fruit this year, though experts say they do not expect prices to exceed those of last season, the average of which was \$7 to \$7.50. The high price for the past ten years was \$18, but in the season of the big crop it was hard to sell at \$4 per barrel. Long Island produces about 10,000 barrels of this fruit annually, but that product is not generally included in the supply considered by dealers.

Cactus as a Cattle Feed.

The vast fields of cactus on our western plains are annually made to yield some new form of profit. One of the latest of these is the use of the prickly plant for cattle feed. The thorns are now being burned off by gasoline torch or softened by being chopped with the plant and allowed to steep in the juices so that the cattle can consume the whole in combination with other foods. It has been found that such feed increases the flow of milk. The glutinous material obtained from the leaves now gives promise of being a valuable paper size and the small red fruits are yielding a profitable supply of alcohol and a very excellent vegetable coloring matter for many purposes. The cactus seems in process of being conquered and may yet become one of our most valuable growths.

State Will Have a Flour and Baking Laboratory.

A complete wheat and flour testing laboratory is to be installed by the State of Minnesota in Room 519 Flour Exchange Building, Minneapolis, under the charge of the State Grain Inspection Department. The purpose will be to give assistance to millers wishing to determine the milling value of wheat received on the Minneapolis market. One of the features will be a miniature mill in which flour will be made from wheat samples. There will be a "toy" bakery where the flour, in turn, will be used for the making of bread. Then there will be testing apparatus for the bread itself.

Tea Regulations Working Well.

A Washington dispatch says: George F. Mitchell, chief tea examiner of the customs division, who recently returned from a visit to ports at which tea is largely imported, says that the new regulations regarding the testing of tea for coloring are working well, and that the administration of the recommendations of the Tea Board is meeting with the approval of the importers. He declared that the new regulations have effected practically uniformity in the examinations at the various ports. Mr. Mitchell visited all custom ports on the continent, including San Francisco, Portland, Tacoma, Boston, Chicago and New York.

Potato Crop Curtailment in Lincolnshire.

Vice Consul James Fisher reports from Hull, England, that the potato fields of North Lincolnshire are being devastated by the rotting of the tops, consequent on excessive wet weather.

er. The fungus first appears as brown spots on the leaves, finally spreading to the tubers, and the loss to farmers will be heavy. Spraying with sulphate of copper solution has been difficult, because of the heavy rains.

Canned Foods Must Be Relabeled.

To come into accordance with the recent ruling of the Board of Food and Drug Inspection on canned foods, it will be necessary for members of the California Fruit Packers' Association to reprint two million labels. This is the dictum of C. H. Butler, general manager of the association. New labels must be affixed to approximately one million cans of fruit and vegetables already packed and labeled.

Cheap Meats in Peru.

The West Coast *Leader* says: "Lima does not suffer from high cost of meat. The ruling prices in the central market are 12, 20, and 25 centavos [6, 10, and 12 cents American] a pound, the latter for choice loin cuts; and it is excellent beef at that.

Potatoes a Good Crop in Texas.

Forty-six thousand acres are planted to Irish potatoes in Texas this year. This is a decrease under last year's acreage of 4,000 acres. The condition of the crop is two per cent better than last year, and the farm price per bushel is given at \$1.28, as compared with \$1.20 on the same date last year.

Immensity of the Oyster Industry.

Indications are that the coming oyster season will be one of the most successful in years. An estimate of 40,000,000 bushels has been made as the yield in this country. London consumes 600,000,000 oysters every year, and Paris 175,000,000.

BOOK REVIEW

Methods of Organic Analysis, by Henry C. Sherman, Ph.D., Professor of Food Chemistry in Columbia University.

Professor Sherman was one of the early suggestions for Dr. Wiley's place in the Bureau of Chemistry. The present work is a second edition, the original having appeared six years ago. The scope of the work in this new edition has been somewhat extended, making it more valuable as a work of reference and as a text-book.

To adequately review so complete a work on so fascinating a subject as organic chemistry in a limited space is nearly an impossibility, so what may be here said on this book must be in commendation of its completeness and by way of recording the high character and ability of its author. Incidentally, this is no book for the novice, but it should delight the amateur chemist as well as inform and lead forward the professional.

(New York: The MacMillan Company; \$2.40 net.)

Henley's Twentieth Century Book of Recipes, Formulas and Processes, edited by Gardner D. Hiscox, M. E.

Do not imagine, because this is a book of "formulas" instead of "formule" that it is not a clever and intelligent work. Many authors and compilers seek to create an atmosphere of erudition by appealing to the Latin grammar. It is not necessary in this case. Nor is the book a work largely filled with impossible or rarely necessary things. Everything in it is practical. It dispenses with an index, because its contents are arranged in alphabetical order, beginning with "Abrasion remedy" and ending with "Zinc, to clean," and in between are 787 pages of information so valuable that the price seems insignificant. There is a good-sized department, nine pages, to-wit, devoted to "re-examination of certain classes of foods." Under "Wines and liquors" the discouraged bar-keep may learn how to compound his own absinth, an article recently barred from import into this country by the Board of Food and Drug Inspection. There are a lot of formulas for special purposes or for trades such as watchmakers, photographers, metal workers, painters, etc., and a perusal of many of them convinces one that they are new or unusual at least.

(New York: The Norman W. Henley Publishing Company; \$3 net.)

Beauty of the highest Type, by Caroline Williams LeFavre. This work has the sub-title, "A scientific and an artistic

aim for a nobler beauty." The author has many ideals, but seems likewise to be self-centered. She is doubtless beautiful herself, and wants others to be beautiful, but her way of putting her ideas impresses one with the obsession that she is her own ideal. There are many practical utterances in the book, but here is an expression likely to arouse ridicule (and the book abounds in them): "The voice reveals much; is yours harsh, loud, husky, or sharp, shallow, high-pitched? Is the articulation poor, indefinite or obstructed? Cleanse your system and past. As a beverage use only water, sassafras tea and lemonade without sugar and fruit drinks. Avoid cheese, milk and hog flesh in any form, avoid tobacco, etc. Eat lightly and chiefly nuts, fruits, ripe olives, olive oil, cereals, a few vegetables, no candies, no gum chewing, nothing between meals." And so on. A heroic regimen, applicable also to diabetes, dyspepsia or dysentery, as well as a husky voice. Our advice would be to cut out Tom gin also. This is not a medical work; it is designed rather to promote a vegetarian cult, which explains perhaps why it is published by the Health Culture Company.

(New York and Passaic, N. J.: The Health Culture Company; cloth, \$1.00; leatherette, 50 cents.)

The Cannery Directory and Allied Interests of the United States.

This is not a work of fiction; it is nothing but fact, and fact sometimes startling. For instance, we learn that Libby, McNeill & Libby are classified as "C-H-J-K-M-O-X-Y-a-e." That is likely to be disconcerting and unnerving to anybody who always had a good opinion of this well-known firm, until he learns that the formula is a key, each letter standing for a food product. As an example "J" means "other articles," while "e" means "berries (all kinds)."

It is interesting also to observe that there are so many canners in the United States that if a sample can of food from each were consigned to one grocer doing an average business he would have to increase his shelf room tenfold. The information in the directory is so systematized as to give all the data in regard to each firm listed in the smallest possible space. The book may be had from Frank E. Gorrell, Secretary of the National Cannery Association.

(Bel Air, Maryland: The National Cannery Association; \$2 net.)

FOR WORLD-WIDE FOOD STANDARDS.

A dispatch from Washington says that the French government, vitally affected by a number of decisions against it on important chemical disputes in this country, has asked for a world's court to consider chemical problems. It has entered into correspondence with various important powers, with the purpose of securing a conference of government representatives at Paris next winter.

The purpose, as interpreted by officials here, is to have these matters determined by a consensus of opinion of the principal countries rather than by the dictum of one government. A number of the recent decisions of the Department of Agriculture and the Pure Food Board apply especially to French products, notably the rulings on the greening of vegetables with copper salts and on absinthe, formerly conspicuous among imports from France.

It was stated that it was unlikely that the United States would send a representative, and that the despatch of a representative would be justified only to secure scientific information for the department or under express authority of Congress.

FOURTH ANNUAL CONVENTION OF FEED CONTROL OFFICIALS.

The fourth annual convention of the Association of Feed Control Officials will be held in Washington, D. C., at the Raleigh, November 18 and 19, 1912.

The definitions of cotton seed meal, gluten feed, oat clippings, white wheat middlings and gluten meal will be special subjects for discussion. Other subjects relating to uniformity and questions affecting the manufacture and control of feeding stuffs generally will be discussed. A program for the meeting is being arranged.

Headquarters for the convention will be at the Raleigh. The sessions of the first day will be open to the public. Upon request, the Secretary, J. D. Turner, of Lexington, Kentucky, will be glad to furnish any further information concerning the meeting.

OBITUARY

Melville Amasa Scovell.

Dr. Melville Amasa Scovell, director of the Kentucky Agricultural Experiment Station and dean of the State College of Agriculture at Lexington, died in that city on August 15th, a victim of endocarditis.

Professor Scovell was born in New Jersey in 1855, and graduated from the University of Illinois in 1875 with the degree of bachelor of sciences. He was first an instructor of chemistry in his alma mater, then an assistant professor and professor of agricultural chemistry between the years 1875 and 1884. His master's degree and doctor of philosophy degree came from his alma mater. For a year he was a special agent for the United States Agricultural Department. He was a pioneer and a leading spirit in the development of the sugar industry in America and contributed greatly to the unification and simplification of methods for the analysis of commercial fertilizers and to the enactment of just laws regulating their sale and distribution. He was a leading figure in the food and drug world and was widely known both in this country and abroad for his vigorous work. While the *AMERICAN FOOD JOURNAL* has differed with him in some of his conclusions, it desires to give him credit for energy, thoroughness and ability, together with the fighting spirit that all men admire. He was a man of firm convictions and strong feelings—both of friendship and enmity.

An admirer of Professor Scovell, writing in a recent number of the *Breeders' Gazette*, says of him:

"That this unselfish unsparing man literally laid down his life on the altar of his country is not doubted by those who knew his work most intimately. His time to rest was always a little ahead of him; always something remained to be done for others, before he could consider himself. Our annals hold record of no life more unsparingly devoted to agricultural interests than that of Professor Scovell. Last winter we begged him to rest a few days in the far south, but he would not quit his campaign before the legislature for adequate funds for the college and station. He promised the visit definitely for next winter. He won from the legislature an unprecedented appropriation of \$50,000 for the station work and an unusually large sum for the college, but the exactions of that campaign are firmly believed to have made him an easy prey to the fatal illness."

As an executive, Professor Scovell displayed genius of a high order. As an administrator of the fertilizer and pure food laws of Kentucky, no less than as an organizer of the experiment station force and later the college faculty, he evinced a genius which would have won him fortune in the commercial walks of life. In the legislative act creating a state fair board, it was ordered that it should consist of a certain number of men, "of which M. A. Scovell shall be one." His interest and industry transcended the college campus. The Fayette Home Telephone Company declares that "the success of this company, in the face of great obstacles, is to a large extent due to his interest, his wisdom and his rare business judgment." The Lexington Park Commission declares that "his interest and zeal for park development in this city was measured only by his strength and intellectual attainments, for he gave to this work the best of which he was capable." The directors of the Phoenix and Third National bank give expression to their "full appreciation of his business capacity, his moral worth, his conspicuous integrity and the intelligent and disinterested devotion with which he served as director of this bank for many years."

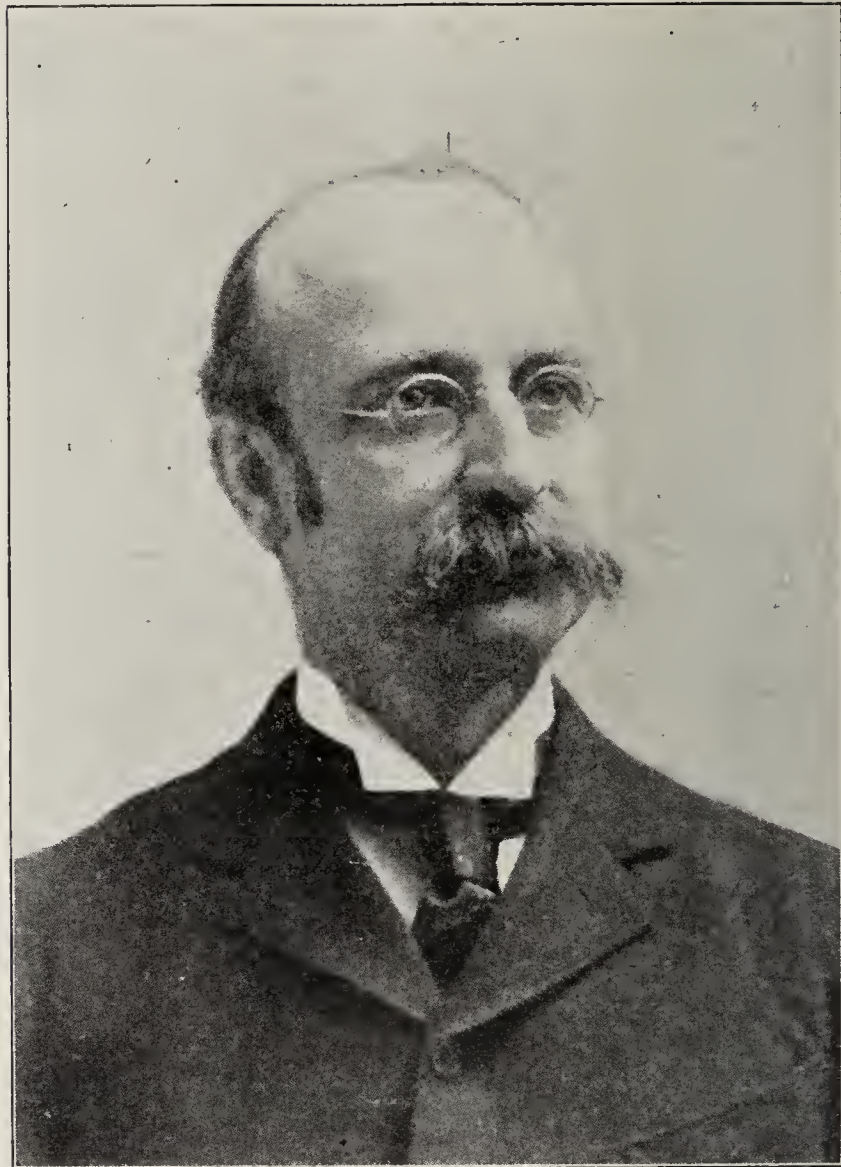
George M. Whitaker.

Dr. George M. Whitaker, Secretary of the National Dairy Union and associate editor of *Hoard's Dairyman*, died at Fort Atkinson, Wisconsin, on August 29th, of acute gastritis.

Dr. Whitaker was born in Southbridge, Massachusetts, in 1851, to which place his body was taken for burial. Up to the time he took up the work of the secretaryship of the National Dairy Union, which was of an exacting character, he had been for many years head of the Market Milk Section of the Dairy Division of the Bureau of Animal Industry in the Department of Agriculture at Washington. To that position he came from the State Board of Health of Massachusetts, where he began his official career as a young man in the seventies. His relations with the Department of Agriculture were not entirely severed, it having been the understanding that when his term of service with the National Dairy Union was ended he would return to the department. He had been secretary of the National Dairy Union nearly a year when

he died. In order to increase his usefulness to this organization, and at the earnest solicitation of ex-Governor Hoard, he had taken up within the past few months the associate editorship of *Hoard's Dairyman*.

Dr. Whitaker's usefulness to the country cannot be measured in money or told in words. He was a man of very



THE LATE DR. GEORGE M. WHITAKER.

gentle manners and modest exterior, but of much power in his field of work. He wrote with great shrewdness and ability, and while he was the active opponent of oleomargarine and its manufacturers, that trade held him in much esteem for his fairness and openness in controversy.

Patrick J. Towle.

Patrick J. Towle, president of the Towle Maple Products Company of St. Paul, died in that city September 6th. He was buried from the residence of his son on September 8th. The deceased was seventy-eight years old, and had been long prominent in the food manufacturing business.

WHAT HUNGARIAN GOULASH IS.

Hungarian goulash is a dish which, as the "best seller" ads say, everyone should know. In the October number of the *Housekeeper* special attention is paid in answering the question. Slice an onion and cook in three tablespoonfuls of pork fat until it is thoroughly browned. Remove the onion and turn in a pound of lean veal and one-half pound of beef cut in very small cubes. Brown these in the fat thoroughly, remove the meat from the pan and place in a casserole. Add one and one-half pints of boiling water and a teaspoonful of paprika. Cover the dish and place in the oven. Place more fat in the frying pan and when smoking hot pour into it a dozen or so balls cut from pared potatoes, one-half dozen balls cut from carrots and the same number cut from turnips. Add them to the casserole after the meat has cooked for an hour and a half. After the sauted vegetables are added, add one teaspoonful of salt, one-half of a bay leaf and one clove, and two tablespoonfuls of flour mixed to a thin paste with cold water. Pour this into the casserole and stir in about a cupful more of boiling water, stir thoroughly, and just before the cover is put on again place one chopped Chili pepper in the dish and cover it. Cook gently for another hour and a half. Serve this from the casserole.

INDIANA LETTER.

(From a Staff Correspondent.)

INDIANAPOLIS, INDIANA, Sept. 10, 1912.

The man who sells dirty and watered milk again has appeared on the horizon in Indiana. The State Food and Drug Commission noticed it at once. A rigid inspection of practically every dairy in the state was begun. The result showed in the list of prosecutions by the department during the month of August and a week or two in July. The fight had its hoped-for effect to a greater or less degree. Now the food officials of the state who have been aiding in the investigation declare that the September records will so far eclipse those of August with regard to dirty milk that the people of the state will be aghast when the figures appear. There were but two prosecutions during August for selling dirty or watered milk in Indiana. But that was because there was but seven prosecutions of all pure food and drug violators in the state—and not one of the other five were violations of the food laws. They each had to do with charges of illegality in drug.

There has been one of the greatest milk famines in Indianapolis and vicinity during the past few weeks that has occurred for years. Children have died because of it. It may be the heat and it may have been the great amount of rain that fell this spring and summer, bringing pasturage to a point of rankness that affects the animals. Anyhow the shortage in the milk supply is evident and many Indianapolis families have been forced to do without it for days. Already the dealers have taken advantage of the opportunity to make their supplies go farther by watering. Deputy state food and drug inspectors have been given orders to pay particular attention to this phase of the pure food work and already they are reporting numerous violations of the statute.

Perhaps the greatest source of commercial pride that Hoosierdom may take upon itself this year—outside of its wonderful grain crops—is its canning industry. The state food commissioner, after collecting statistics on the canning industry in Indiana, its rapid growth and the enlargement of approximately a score of plants this summer, has issued a public statement in the following words:

"Indiana is pre-eminently adapted for the production of canned fruits and vegetables, and this year 125 factories will place the harvest of tens of thousands of acres in tin cans for future consumption. A few years ago the canning industry was operated by rule of thumb. It had no scientific management and the necessity for such control was entirely unappreciated. The idea of the canner was to prevent his goods from spoilage—further than that he had little care. Within the last few years, and especially since the passage of the pure food and sanitary laws, the canning industry has made great development along other lines. The canner is now an expert. His plant is built to meet the needs of his business and his goods are not only so packed that they will keep from spoilage, but they are made from the best of sound, ripe material and so processed that the flavor of the fresh, ripe fruit or vegetables goes in to the can.

"The State Board of Health has been very active in regulating the canning industry, and this year the business has been carried on under better conditions, more complete equipment and with a fuller scientific control than ever before. Since the close of last year a dozen new factories have been built, not the former cheap sheds, but substantial buildings of brick and concrete, with the best machinery available."

The statement then went on to describe one of the newer of the canning factories in the state, that at Paoli, Indiana. Concluding, the state food commissioner declared: "This model plant with its unique construction, which eliminates pumping material in the process of manufacture from one machine to another and so minimizes the possibility of bacterial contamination and the growth of moulds, its perfect ventilation and drainage systems, its impervious floors and, more than all else, its careful scientific control, make it a model and bespeak for Indiana an increased appreciation of the value and purity of her food products."

The virtual elimination of Dr. Barnard from the race for the place of government chemist, left vacant by the resignation of Dr. Wiley, came with somewhat as a blow to his friends in Indiana, where a "gum-shoe" campaign of the most ardent type had been in progress on behalf of the Hoosier. Because Dr. Barnard stands for the same things that Dr. Wiley does, close friends of the commissioner, such as Dr. J. N. Hurty, State Health Commissioner, and others, declared several months ago that the antagonism of the "interests" would be aroused against his candidacy. On good authority the Indianians have it from Washington that such a situation arose. Secretary of Agriculture Wilson just "could-

n't see" Dr. Barnard and told President Taft that. The President got out of it, according to reports that reached Indiana from members of the Hoosier delegation in Congress, by saying he could not make an appointment that was adverse to the wishes of a member of his cabinet. Therefore the Hoosier pure food expert has given up his fight for the place—unless some unforeseen situation should arise whereby there might be a new secretary of agriculture.

The state's pure food department has come out for the clean bakery. A standard has been prepared by the department and adopted and Indiana bakeries generally are declaring in favor of such an innovation. The standard sets out that the bakeries should be thoroughly sanitary, provided with an abundance of absolutely pure water, that the establishments should be well lighted and that each employe should be required to produce a health certificate, showing him to be free from communicable diseases. The standard has been adopted in other portions of the country. Among the provisions of the standard is one which formerly was a separate branch of activities of the State Board of Health. It provides for the proper wrapping of breadstuffs when they are sold and the state food commissioner's force is making a strenuous campaign to educate the dealers in breads as well as the manufacturers to the fact that some protection must be given the consumer.

The total of condemnations of food-handling establishments in Indiana in August was larger than usual, forty-nine such condemnations being reported. Twenty-eight of those, including five hotels and restaurants and three slaughter houses, were condemned because of improper construction. Forty-four of the total number were condemned because of insanitary conditions, some of them are being improperly constructed. Three bakeries, three canning factories, one confectionery, one creamery, four drug stores, three dairies, five groceries, five groceries and meat markets combined, one grocery and drug store combined, nine hotels and restaurants, three meat markets, two milk depots and nine slaughter houses were in the list of places condemned and closed.

In the state laboratories the samples of foods analyzed were fewer than for several months, a total of seventy-five specimens of foods being examined. But thirty-three of those were illegal under the Indiana laws, the number being unusually low. The greater per cent of the illegal samples were milks, seventeen samples of illegal milk being found.

Despite the hot weather of the past month, housewives in Indiana have "put up" more fruit than for many years. The exhibits of that character at the annual state fair, held here from September 2nd to September 6th far exceeded any similar exhibits during a decade. Pastries and displays of other cooked products also were in evidence to an unprecedented degree this year. Secretary Charles Downing of the State Fair Board said that the fair managers had been more surprised at the wonderful culinary exhibits made by the women of the state than at any of the other advances in exhibits on the grounds. Many of the culinary exhibits were made by women of Marion county, in which Indianapolis is located, but several of the larger winners were from points in the extreme northern and extreme southern parts of the state.

DOES THIS SEEM MIRACULOUS?

In Leyden there is a street, Mirakel Straat, which, according to an old legend, derives its name from a miracle which happened there in 1315, and which is related as follows in an old Dutch history: "In the aforesaid years of famine in the town of Leyden there occurred a signal miracle to two women who lived next door to one another; for one having bought a barley loaf, she cut it into two pieces and laid one half by, for that was all her living, because of the great dearth and famine that prevailed. And as she stood, and was cutting off the one half for her children, her neighbor, in great want and need through hunger, saw her and begged her to give her the other half and she would pay her well. But she denied again and again, and affirmed mightily and by oath, that she had no other bread, and as her neighbor would not believe her, she said in an angry word: 'If I have any bread in my house more than this, I pray God that it may turn into stone.' Then her neighbor left her and went away. But when the first half of the loaf was eaten up, and she went for the other half which she had laid by, she found that bread was become stone, which stone, in the same form as the bread, is now in Leyden at St. Peter's Church, and as a sign they are wont to lay it on all high feast days before the Holy Ghost." A stone, supposed to be this same one, is now shown at the hospital at Middleburg, where in the vestibule hangs an old picture representing the Leyden miracle. It is, however, generally believed that the original stone loaf disappeared

THE AMERICAN FOOD JOURNAL



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IS THIS MIDSUMMER MADNESS?

Our esteemed cotemporary, the *National Food Magazine*, is due for another change of name. It will never have a change of heart, and an accession of brains is equally hopeless. So to make the title conform to the contents, in order that a charge of misbranding will not lie, we suggest that it be rechristened "Fairy Tales," with a sub-title "Down-trodden Woman's Defender." A motto, embodying the actuating sentiments of the management in these words, "Hand 'em all the bunk they can swallow," would not be inappropriate.

There is one excellent thing about the *National Food Magazine*, however; it can crowd more buncombe, bombast and downright, heartfelt prevarication into one short paragraph than anyone we know. Listen to this:

Excepting the dry transcript of the secretary's minutes printed for the food commissioners, the *National Food Magazine* is the only publication in the United States that published the proceedings of the food commissioners' convention at Seattle. All the newspapers of Seattle, excepting one, ignored the convention, and that one printed only fragmentary excerpts gleaned from most accessible sources. It was a revelation to the food world, therefore, when the August issue of this magazine appeared with its account of the many interesting features of the proceedings—the sensational attack on women's fitness for food offices; the war on "made-cream;" the advocacy of physical examination of persons handling food; the names of the new officers, and text of the president's annual message. This magazine was the only source through which the American women learned that they had been accused of being sensationalists, and "only fit for dress parade." No report of the convention was published outside of Seattle until after the *National Food Magazine's* account appeared and subsequent newspaper reports of the proceedings were obtained entirely from this magazine.

The dry "transcript of the secretary's minutes" constitute the exception. This "dry transcript," occupying over one hundred pages, was printed in the AMERICAN FOOD JOURNAL for July. It covered every word of the convention and every item that could by any possibility be called a part of the proceedings. The stenographic expense of what appeared in the AMERICAN FOOD JOURNAL was met by its publisher, and this expense was incurred for the purpose that has always been foremost in the policy of this journal of printing

authentic and authoritative information, to the end that there be no "come-backs."

The *National Food Magazine* subsequently printed a garbled and much reduced report of the convention, so obviously faked as to be pitiful, and the feeble intellect that conceived the idea of "playing up" the attack on "women's fitness for food work" is perhaps the same that inspired the foregoing bombastic claim of exclusiveness in giving the public information of the food commissioners' convention. The reference to the attitude of the Seattle newspapers discloses the hollowness of the *National Food Magazine's* claim. Here is the true reason why "only one Seattle newspaper gave the convention any attention." The *Seattle Post-Intelligencer* is the only Seattle paper sold at those street-corner out-of-town paper stands in Chicago. This same paper was represented in the convention by a bright youth who saw a story in the "attack on women's fitness for food offices" and accordingly he "featured" that as his story of the day after the usual newspaper style. The same story is the one featured by the *National Food Magazine*, although the discussion, as revealed by the official proceedings, is in no wise an attack, and the attempt to make it appear so demonstrated the exceedingly small mental calibre of the editorial staff of the *National Food Magazine*.

The war on "made cream," another sensational feature of the convention, according to the *National Food Magazine*, had this much basis in fact, that there was a prolonged discussion of the use of milk emulsified with butter-fat and oleo oil as a substitute for cream in the manufacture of ice cream. Although the *National Food Magazine* may not know it, and probably does not, this product, under various names, has been in use for many months. It is produced by a patented process, and the factories where it is made are under inspection by the Bureau of Animal Industry. The conclusion of the food commissioners was that where the article was wholesome and properly labeled its use could be permitted, and in that conclusion the food commission of Illinois concurs in a statement made public last month covering an agitation of the subject in Decatur. The facts about the "war on made cream" are that there is no war other than that featured by the *Seattle Post-Intelligencer* and copied into the pages of the *National Food Magazine*.

Our esteemed (more or less) cotemporary betrays very frequently this tendency to be behind the times as to news and mixed as to facts. In the same issue in which the editorial in which these ridiculous claims are made appears is a news item regarding new breakfast foods, credited to John A. Howland, a very prolific newspaper writer and a faker of pseudo-scientific copy, that was printed in the AMERICAN FOOD JOURNAL last May. By the usual round-about method of some newspaper copying it without credit, then it being clipped by a bureau, and then rewritten and garbled up by a newspaper hack, this item reappears as a fresh bit of news in the *National Food Magazine*.

How authentic and reliable the "report" of the Seattle convention printed in the August *National Food Magazine* is, may be gathered from the fact that the man who compiled it from the *Seattle Post-Intelligencer's* sensational daily newspaper matter did not learn in time that the name of the organization had been changed to the American Association of Dairy, Food and Drug Officials, and it appeared under

the old name of the Association of State and National Food and Dairy Departments. This error is corrected in the current issue, under the fakement of giving the public additional facts, and the change in name is "featured" as a new sensation, together with a synopsis of the new constitution and the resolutions that were passed at the convention, stolen bodily from the official proceedings in the AMERICAN FOOD JOURNAL.

Naturally, if the *National Food Magazine* had a wide circulation, such a statement as that made in the last sentence of the editorial quoted, to the effect that "no report of the convention was published outside of Seattle until after the *National Food Magazine's* account appeared and subsequent newspaper reports of the proceedings were obtained only from this magazine," would have come to public attention and have been refuted by the parties at interest ere this. With a clientele of subscribers made up largely of women, who have been induced to subscribe in the belief that they were thereby "supporting" an organ given to their interests, it is easy to get by with such bombastic statements, particularly where an appeal to the subscribers is made by the creation of an "attack" on "woman's fitness for food work."

There is such a thing, however, as carrying a thing too far, and when some of the women who have given up their money in the belief that they were helping the "cause" learn how egregiously they have been swindled and how they are continually misled not only by being given spurious information and stale news, but by lying claims of work done in their interest, there will be a notable falling off of support for this hollow and irresponsible organ.

"DE GAREN MAAS."

It happened one time in the middle ages, in one of those thrifty Netherlands cities where trade flourished while war and pestilence went forward elsewhere, that a buyer of wool and yarn made a fortune in that pursuit and was eventually elected burgomaster and became instrumental in causing the erection of a splendid rathhaus (which is a council chamber or town hall). So goes the classic as the present writer recalls it from indistinct memory. In the course of time the burgomaster-yarn buyer died. Now it happened that his fortune had been based on more than thrift, for he had been guilty of adding a small, a very small, amount of each ell to yarn as he bought, and of subtracting a small, a very small, amount from the ell when he sold. And all this dishonesty had been so artfully concealed during his life that our burgomaster when he died left this life in the odor of sanctity and presumably went straight to heaven, where all good Dutchmen go when they die.

But instead he went to hell, and there suffered the tortures of the damned for his dishonesty in the wrong use of the ell-measure. He escaped out of hell for one night, long enough to warn his sons of the folly of doing as he had done in falsifying the yarn measure and to urge them to cause the true measure to be stamped or graven on the walls of the town hall, so that yarn might be henceforth bought and sold in the town honestly. This was done, and an inscription was cut over it in these words: "De Garen-Maas" ("The yarn measure").

The standard apple barrel law, passed by the Senate on July 28 with some few amendments that will be

accepted by the House of Representatives, so that it may become effective on July 1, 1913, is strongly reminiscent of the "Garen-maas." What good purpose it will serve other than to quiet the consciences of the law-makers (who have been bombarded with petitions and resolutions from constituents and organizations urging all kinds of reform in the food law) is not apparent. It will subject the apple trade to rigid requirements and occasion some inconvenience to consumers. A shipper of apples under this law ought to be able to know whether or not he has done anything in violation of it after the jury brings in a verdict. We quote the text of the law in full:

That the standard barrel for apples shall be of the following dimensions when measured without distention of its parts: Length of stave, twenty-eight and one-half inches; diameter of head, seventeen and one-eighth inches; distance between heads, twenty-six inches; circumference of bulge, sixty-four inches outside measurement, representing as nearly as possible seven thousand fifty-six cubic inches. Provided that steel barrels containing the interior dimensions provided for in this act shall be construed as a compliance therewith.

Section 2. That the standard grades for apples when packed in barrels which shall be shipped or delivered for shipment in interstate or foreign commerce, or which shall be sold or offered for sale within the District of Columbia or the Territories of the United States, shall be as follows: Apples of one variety, which are well grown specimens, hand picked, of good color for the variety, normal shape, practically free from insect and fungous injury, bruises, and other defects, except such as are necessarily caused in the operation of packing, or apples of one variety which are not more than ten per centum below the foregoing specifications, shall be "Standard grade minimum size two and one-half inches," if the minimum size of the apples is two and one-half inches in transverse diameter; "Standard grade minimum size two and one-fourth inches," if the minimum size of the apples is two and one-fourth inches in transverse diameter; or "Standard grade minimum size two inches," if the minimum size of the apples is two inches in transverse diameter.

Section 3. That the barrels in which apples are packed in accordance with the provision of this act may be branded in accordance with Section 2 of this act.

Section 4. That all barrels packed with apples shall be deemed to be below standard if the barrel bears any statement, design, or device indicating that the barrel is a standard barrel of apples, as herein defined, and the capacity of the barrel is less than the capacity prescribed by Section 1 of this act, unless the barrel shall be plainly marked on end and side with words or figures showing the fractional relation which the actual capacity of the barrel bears to the capacity prescribed by Section 1 of this act. The marking required by this paragraph shall be in block letters of size not less than seventy-two point one-inch gothic.

Section 5. That barrels packed with apples shall be deemed to be misbranded within the meaning of this act—

First. If the barrel bears any statement, design, or device indicating that the apples contained therein are "Standard" grade and the apples when packed do not conform to the requirements prescribed by Section 2 of this act.

Second. If the barrel bears any statement, design, or device indicating that the apples contained therein are "Standard" grade and the barrel fails to bear also a statement of the name of the variety, the name of the locality where grown, and the name of the packer or the person by whose authority the apples were packed and the barrel marked.

Section 6. That any person, firm or corporation, or association who shall knowingly pack or cause to be packed apples in barrels or who shall knowingly sell or offer for sale such barrels in violation of the provisions of this act, shall be liable to a penalty of one dollar and costs for each such barrel so sold or offered for sale, to be recovered at the suit of the United States in any court of the United States having jurisdiction.

What would happen to a man who attached the word "Standard" to a barrel containing apples of standard size, the barrel itself lacking standard specifications; is difficult to figure out. The "provisions" of the act are obscure, perhaps purposely so. Is it a crime to ship apples not "standard" in barrels not "standard," pro-

vided there are no improprieties in the label—that is, supposing the label to correctly state the contents and capacity of the barrel? As far as our limited powers of perception go, this barrel law is no law at all, but merely something to prove that our law-makers have done something to “amend” the food law. Members of the Sixty-second Congress can go down to posterity now as conscientious performers of their sworn duty. They will not be called back from their graves (or from the tortures beyond the grave which some of them may have earned) to pass a “Garen-maas” of apples at any rate.

MISBRANDED NOTICES OF JUDGMENT.

Just as we feared, the Government has come out with a notice of judgment, numbered 1552, in which the Alart & McGuire mustard case is referred to as “Alleged Misbranding of Mustard.” To show how unjust this designation is, in spite of the fact that the final paragraph in the notice admits that the Government lost the case, we quote from the decision of Judge Holt, of the United States District Court for the Southern District of New York, before whom the case was tried (this report having been printed in the AMERICAN FOOD JOURNAL of April 15, 1912):

“The evidence shows that they used to make mustard of wild mustard entirely, and that it is still used for a cheaper form of mustard. It seems to me that there is no ground to send this case to the jury on the ground that the prepared mustard contained 10 per cent of wild mustard, which is the same thing in a milder form, or on the ground that it contained turmeric, which is a vegetable substance of the nature of a spice, at all events a condiment, used daily in the east as an article of food in connection with curry. It seems to me there is no ground for holding that they are not normal ingredients of prepared mustard. Prepared mustard contains all these different ingredients, these spices, salt, and so on, and it is supposed to make a better brand of mustard; that is, people prefer it to simple dry mustard. If it contains nothing unwholesome and improper, I do not see that the food act prohibits it.

“The other information charges that the prepared mustard was misbranded because it contains turmeric, the said turmeric being an artificial coloring matter, and not one of the normal ingredients of the prepared mustard. Now it is not an artificial coloring matter in any ordinary sense; it is a natural coloring matter. It may be said that it gives an artificial color to the mustard, because it produces a color different from the color of mustard, but it is not artificial. It is a kind of condiment which produces a slight change in the color. The Government says it is not one of the normal ingredients of prepared mustard. I think the evidence shows that it has been for a great many years. It may be that people prefer it. They prefer curry, which is eaten to a large extent all over the world, and turmeric is the principal ingredient of curry. It may very well be that the addition of the different condiments and spices gives a flavor to the preparation which is preferred to plain simple mustard.

“Then the other information charges that the mustard sold was adulterated because charlock and turmeric have been mixed and packed with the article so as to reduce and lower it so as to injuriously affect its quality and strength.

“I have felt some doubt whether I should not send that question to the jury. I suppose that the addition of this wild mustard has some slight tendency to reduce the quality and strength of the original mustard, but the point to my mind is whether there may not be articles so pungent, so strong, that it is desirable to reduce their strength. I think that is what took place with the preparation of some of these mustards. There was found to be a large demand for these milder forms.”

At this point the assistant United States attorney interrupted. “We claim it should have been declared on the label,” he said.

“I do not know about that,” replied the court. “Suppose it is the article which the public wants. If it is the honest purpose to reduce the strength it is a perfectly legitimate thing in the manufacture of food products to do. There is nothing

in the evidence in this case that tends to show that this wild mustard was put in for the purpose of cheapening the product, and making money, and selling the mustard as genuine mustard.

“I think upon the whole case that the Government has not made out a case at all on any of the counts. I direct a verdict for the defendant of ‘not guilty.’”

The Government really suffered a crushing defeat here, but no one reading the title of the notice of judgment would imagine but that the case had been decided against the defendant. This judgment has not been “accepted” by the Government as a precedent, by the way, and various state food officials have been informed to that effect over the signature of R. E. Doolittle, acting chief of the Bureau of Chemistry. Mr. Thomas E. Lannen, attorney for the National Confectioners’ Association, in his address at the recent Niagara Falls convention of the association, referred to this practice by the Government in the following words:

“There is another manner of publishing notices of judgments which does not do full justice to the firm that has received an honorable acquittal of charges made against them. That is the practice of the Government in heading such notices with the words ‘Alleged Misbranding,’ ‘Alleged Adulteration,’ etc. Notice of Judgment No. 1335 is the notice of the acquittal of a member of the National Confectioners’ Association on a charge brought against him for shipping a product which the Government claimed to be adulterated. The notice says that adulteration was alleged because glucose had been mixed with the product ‘so as to reduce and lower and injuriously affect its quality and strength and had been substituted in part for said article.’ The notice also shows that there was a jury trial; and that the court submitted the case to the jury on its merits. The notice shows in the last two lines that the jury returned a verdict of not guilty. But the notice is headed in heavy black type: ‘Alleged Adulteration,’ etc. I say that is not the proper title to put on the notice of that judgment. The word ‘alleged’ is one that men are prone to use when they want to express themselves with caution. During the course of the trial of a man accused of murder, newspapers refer to him as ‘the alleged murderer.’ And the word is used in other ways to protect its user.

The Standard dictionary defines the word ‘alleged’ to mean: ‘Asserted to be truth; especially, asserted but not proved or admitted; asserted to be (what is specified), as, an alleged criminal.’ There would seem to be no good reason why the Government officials should make use of that word in stating the simple fact of the outcome of a trial. The law provides that notice of the judgment shall be published. Not the judgment of the Department of Agriculture, but the judgment of the court. The judgment of the court in that case was that the product was not adulterated, and the notice should be headed so as to plainly state that fact. The use of the words ‘Alleged Adulteration’ only serves the purpose of parading the Government’s contentions before the public and tends to conceal the real facts of the judgment.

The point seems to be well taken, and we suggest that those officials having the preparation of these notices in charge modify their methods in some way to get the facts before the public in a less objectionable manner.

BRAINS NEEDED IN THE SANCTUM.

There is some reason to hope that the various schools of journalism that have been established or are shooting out new branches in different parts of the country will turn out a brand of journalist less like the present product, so that the next era or epoch of newspaper production will have less of the flavor of machine oil, and its exponents will have a tendency to sit up and act like intelligent human beings. Nowhere in the whole realm of machine-made and stereotype journalism does machine manufacture and stereotype form get in its deadly work so thoroughly as in the writing of headlines. No doubt

sitting at the round table has a tendency eventually to turn the brain into a partially ossified mass incapable of performing the normal functions of the human brain, but that fact, even if known, would hardly satisfy a public looking for truth in the headlines, and there is many an ice cream maker who will not accept it at all as an explanation of the following head, which we shear from the Marshalltown (Iowa) *Times-Republican*.

BUGS IN ICE CREAM

DAIRY BACTERIOLOGISTS AT
AMES CONDUCT HEALTH
EXPERIMENTS.

MILLIONS OF ORGANISMS
FOUND IN SUMMER DELICACY

This was printed over a fairly well-written account of the work being done at the Iowa State College at Ames in gathering data of bacterial count in ice cream, with a view to determining whether bacterial standards for ice cream could be safely established. Lots of people get their information from the headlines, which are supposed to "tell the story," and lose sight of what the story really is. Again, with our machine-made style of journalism, heads must be just so many letters and spaces long, otherwise they do not fit, and if they do not fit the foreman throws a fit. Then there is the rush and turmoil of getting to press to consider, and in ice cream weather the albumen of the brain coagulates readily anyway. So the ice cream manufacturers and the daily newspaper readers must really pin their faith to this new idea of fitting journalists for their duties instead of fitting their duties to some cast-iron model and then robbing the farms and blacksmith shops of the country of likely apprentices to mould them on the model and turn out copy-desk men who write about "bugs" in ice cream. The Pulitzer School of Journalism, founded by a far-seeing newspaper man, recognized the eventual need of brains in the sanctum, and this has encouraged some of the fresh-water colleges to hope that a journalist outfitted with actual brains might come into vogue. The sooner the quicker, we say.

A LOWERED COST OF LIVING.

Florida will market seven million boxes of citrus fruits; apples in Nebraska are going to waste under the trees; unless an early frost (of which there is no likelihood) occurs, there will be harvested the largest corn crop this country ever produced; reports from North Dakota state that wheat is threshing forty or more bushels to the acre; Maine, Colorado, Minnesota and Michigan will have larger crops as well as increased acreage of potatoes; Cuba's sugar crop is likely to exceed the largest crop hitherto by fifty thousand tons; flour is so abundant that it is a drug in

foreign ports; peaches, pears, plums and apricots in Utah and Colorado are so numerous that the Denver and Rio Grande Railway cannot furnish cars enough to handle them; plans are being urged to increase the production of beef by forcing the raising of calves by law; Iowa is educating farmers to increase the state's dairy production by selective tests of cows; the Department of Agriculture proposes to increase the value of the country's egg crop by forty millions of dollars by improved methods of handling; Louisiana rice mills are preparing to handle a forty per cent increase in the average crop. And so on along the line. With hardly any exception food products will be more plentiful this year than in a decade past. Unless all signs fail, unless the information at hand is erroneous, there will be an automatic decrease in the cost of living. With this expectation, if there is no reduction, something is wrong with our national economy that will require rectifying.

CONGRESS ON HYGIENE AND DEMOGRAPHY.

The Fifteenth International Congress on Hygiene and Demography will be held in Washington, September 23d to 28th. This very important gathering of scientific men will be held in consequence of an invitation extended by the government of the United States, and accepted by the Fourteenth International Congress in its session at Berlin, in 1907.

Through the diplomatic officers of this country invitations have been extended to all the important foreign countries and over thirty of these have appointed delegates to the Washington meeting. Besides the official delegates a very considerable number of physicians, chemists, physiologists and sanitarians have signified their intention to be present and take part in the deliberation of the congress.

The congress will be organized in two divisions, a Division of Hygiene with eight sections, and a Division of Demography with one section. Under Section II, on Dietetic Hygiene and Hygienic Physiology, the program will present a considerable number of papers bearing on topics connected with foods, nutrition and growth, food preservatives, practical dietetics, etc.

Great interest attaches to this congress, as it brings together one of the most important bodies of scientific men in the world, and because of the very practical nature of the subjects discussed, most of which, of course, are not related to food questions. At the close of the congress many of the foreign participants will make excursions to different parts of the United States. In a number of our large cities arrangements are now being made for their entertainment.

THE CHEMISTS' CONGRESS.

The opening session of the Eighth International Congress of Applied Chemistry was held in Washington, and President Taft welcomed the delegates. There were several informal functions at which the President was the host, after which the delegates went to New York, where the business and special sessions were begun on September 6th and concluded on September 13th. Any kind of a comprehensive resumé of the congress will not be attempted in these pages, and detailed reference to parts of the proceedings is deferred. Papers of interest to the food world will be published from time to time, and an attempt made to give the reader a concept of the im-

portance of this event not only to the science of chemistry but to humanity at large.

Many eminent chemists were present at the congress and a vast amount of original matter and results of research work was presented in the papers read in the various sections. Arrangements for the comfort and entertainment of guests from this country and abroad were undertaken largely by the Chemists' Club of New York, which ably supplemented the work of the entertainment committee of the congress. The Verein Deutscher Chemiker took charge of the various automobile trips around New York made by the visitors. The final banquet of the congress was held at the Waldorf-Astoria under the auspices of the Society of Chemical Industry.

MILKMEN AND THE LAW.

Some months ago Dr. Cutler, Food Commissioner of Missouri, found that much watered milk was being shipped from central and southern Illinois to St. Louis. The violation of the law did not come under the jurisdiction of the Illinois authorities and it was difficult to reach the Illinois farmers by prosecuting local dealers in St. Louis. Dr. Cutler therefore sought the aid of the Federal Government and a number of inspectors from the Bureau of Chemistry were put on the job of detecting violators of the Federal pure food and drugs act who shipped watered or otherwise adulterated milk across the state line from Illinois to Missouri. The results of the work are seen in the determination of a number of milk producers around Alton to quit the business. They claim that the Government regulations are too stringent. Commenting on this situation, the *Alton Times* says:

The farmer who quits the dairy business because the enforcement of the pure food laws is becoming so strict ought to quit. In fact, he ought never to have gone into the business. Such farmers will gain no sympathy. The only reflection that comforts is that here are comparatively few such. The vast majority of farmers are not only honest but strictly conscientious and when the competition of the other kind is eliminated, it will elevate the remuneration of the conscientious ones and make their situation more pleasant and profitable.

HOW TO GET RID OF FLIES.

The consulate at Prague, Bohemia, has from time to time received letters from manufacturers of various sorts of fly paper in the United States who wish to extend their trade. These letters have been fully answered giving the names and addresses of local dealers, and also the various sorts of American and other fly paper sold in Prague.

It is not possible to work up an extensive trade in Bohemia, as there are not sufficient flies to exterminate. In most of the dining rooms, during the course of a meal, perhaps three or four flies appear during the season. In restaurants there are very few flies.

Screen doors to keep out flies and other insects are unknown. The buildings are all constructed of brick, stone or concrete. The docks along the river front are of granite. The pavements and sidewalks are made of granite blocks. There are no wooden sidewalks, stairways or buildings in the city. Decayed vegetable or animal matter is not openly exposed to flies, and the streets are frequently cleaned during each day. There are no open drains in the city to attract and breed flies. "I can only ascribe the absence of flies," says Consul J. I. Brittain, "to the lack of breeding places."

The Point of View

Responsibilities of Iconoclasm.

Old Doc Evans, who was once Commissioner of Health of the city of Chicago, but who now conducts a department on "How to Keep Well" in the *Chicago Tribune*, besides engaging in other activities, has some good ideas. On a recent day he said: "Nothing is gained by tearing down and not building up. Therefore, when the iconoclasts prove that fish is not brain food, that beer does not make milk, that oyster shells do not make hens lay eggs, exact and correct information must come in to take the vacated places. Nature abhors a vacuum. Whenever one kills a lie it is necessary to tell the truth, else a new lie will grow up to take the place of the old one. When the medical profession quit giving the people medicine every fifteen minutes, and then failed to teach them social science, psychology and physiology, the place vacated grew a choice assortment of weeds. The quackish talk of the food fakers must give way before the accurate solution of some of the chemical and physiological questions concerning foods."

Which is pretty good philosophy but rather mixed metaphor. Nature replaces waste or destroyed tissue, and builds up where it tears down, as well as tears down to build up, all true, but that fact does not make it incumbent upon us iconoclasts to erect new images in place of those torn down. To destroy a lie does not mean that it must be replaced by a truth. To destroy the lie is no mean job. Moses did not erect another idol when he cast down the golden calf. He didn't have to. The people knew the true God from whom they had departed, and they can learn the truth that the discredited lie has supplanted if they will.

The imparting of truth is not necessarily the duty of the iconoclast. His field of work covers only the breaking of the idols. Some one else may come along with the truth or erect another false god or implant another lie, but it need not reflect on the one who cast down the idol or the discredited lie. And there is this much about iconoclasm—it imposes no duties and carries no responsibilities but those of destruction. To tell the truth is sometimes difficult. To search for the truth is often a fruitless quest. So many men, as Doc Evans has probably found, do not want the truth when it is offered to them, that the replacing of error by truth is a difficult feat. No wonder strong men shrink from it.

* * *

It's Loaded.

It is no funeral of ours, but if we were concerned in the success of any political party, we would recommend its candidates to leave the department of health stuff severely alone. It's loaded. Doc Evans, Professor Irving Fisher of Yale, Dr. Woods Hutchinson, Dr. J. M. McCormack, Dr. Thomas Darlington and Dr. J. B. Murphy have been in conference with Governor Wilson on the question, and as a result the weight of those weighty propagandists of good health and pure food is going to be swung for the Democratic party. Dr. Evans and Dr. Hutchinson ought to know better. The writings of both these gentlemen indicate that they are onto the buncombe usually passed out by health and pure food agitators. Dr.

Evans also has been a reader of the AMERICAN FOOD JOURNAL, which surely has done enough tearing down on the health department proposal, whether it has imparted any truth to supplant the error or not. But political exigencies make men do strange things. All the gentlemen in this conference, we take it, are Democrats, interested in the success of their party. Doubtless they believe that the health and pure food agitation can be made to stand up and look like an issue. There are a lot of hard-headed business men and a lot of professional gentlemen, as well as a considerable number of laymen, who fear that the health department proposal, which lurks behind this innocent conference on health and pure food, is a means to enable the medical profession to monopolize a thing that should not be monopolized, and the declaration rather blindly made by Governor Wilson, that "I expect to make the question of the proper regulation of public health and pure food one of the principal features of my campaign," may foreshadow disaster that could have been avoided if it had been left alone as a "feature" or as an "issue." Doc Wiley is somewhere around the country denouncing Roosevelt and whooping it up for Wilson, with an eye to a place in the cabinet. Doc Wiley is also loaded and it would be advisable to throw a bucket of cold water on him before he explodes with disastrous effect.

* * *

Crops Are Fine, But—

It might have been expected. The turkey crop this year is going to be short. Apples are rotting under the trees. Minnesota and Maine and Michigan are going to harvest bumper potato crops, the cranberry marshes of Cape Cod will yield thirty per cent more cranberries than ever before, and everything was all set when the news came that turkeys, the principal ingredient of our national Thanksgiving feast, will be short. It is enough to make one say what Marshal Bozaine said at the battle of Waterloo. The authority for this disheartening news is none other than R. D. Wainwright, of Cresco, Iowa. Cresco is on the map all right, for we looked it up, but we have our doubts about Mr. Wainwright. Anyway, this is how he puts it: "The Thanksgiving turkey is going to cost a heap more than it did last year. Everywhere it is reported that turkeys will be scarce this year. In most places the young turkeys have been depleted so much that not more than one or two have been saved out of an entire brood. Some strangely fatal malady has attacked them, it seems, and nobody appears to know what it is or how to cure it. It is a hard task to raise young turkeys with the best of conditions, but when unlooked-for disease attacks them the work of raising them for market is almost impossible of accomplishment. Chickens are better off than turkeys, but the demand for them will be great, and has been great, because many persons have gone to eating chicken instead of beef."

Mr. Wainwright is listed as a farmer, and he talks like one. He says turkey is going to cost a "heap" more than it did last year. That settles it. We believe it.

ESTHETICS AND DIETETICS.

McMasters was walking with a beautiful girl in a wild New England wood.

"What is your favorite flower, Mr. McMasters?" the girl asked, softly.

McMasters thought a moment, then cleared his throat and answered:

"Well, I believe I like the whole wheat best."—*St. Louis Globe-Democrat.*

With the State Departments

California.

One of the best state bulletins that has come to the attention of the AMERICAN FOOD JOURNAL is one recently issued by the California State Board of Health. Its title is "The Values of Foods," and under this general head are grouped ten articles by M. E. Jaffa, Director of the State Food and Drug Laboratory, having the following titles: "General Principles Underlying the Use of Foods;" "The Nutritive Value of Foods;" "Digestibility of Foods;" "The Family Table;" "Food for Growing Children;" "Feeding Convalescents;" "Meat Substitutes;" "Some Popular Errors;" "The Consumer and the Pure Food Laws," and "Farmers' Bulletins on Human Foods." Mr. Jaffa does not agree with all the writers on these subjects, but he is in the enviable position of not having to care whether his views meet with favor or not, and he can speak the truth as it appears to him. We are not informed whether the edition of this admirable bulletin is large or limited, but its value is so great that we recommend our readers to send for copies in the hope that they may be available.

Illinois.

Mr. Albert Erickson, recently made chief clerk of the Illinois Food Commission, is a resident of Chicago. He was



ALBERT ERICKSON.

given the position on account of his clerical ability rather than for experience in food work, the need of which is looked upon as negligible in such an office.

Iowa.

A bulletin of much volume and unquestioned value, issued under date of July 1st, comes from the Iowa department. It covers a variety of subjects, but the one of principal interest, as illustrating a new viewpoint on the part of food officials in agricultural states, is found under the head of vinegar. The bulletin says:

"There is so much ignorance existing in the minds of the people, both dealers and consumers, in regard to vinegar that we desire, if possible, to correct some of the absurd statements we have heard made.

"The statute of this state defines and sets standards for six different kinds of vinegar, viz., cider vinegar, wine vinegar, malt vinegar, sugar vinegar, glucose vinegar and distilled vinegar.

"The term vinegar when used without any qualifying statement is held to mean cider vinegar.

"The first step in the manufacture of a vinegar is the selection of some product which contains starch or sugar. The grains which are used for the manufacture of malt vinegar or the distilled vinegar contain starch. This starch by the malting process is converted into sugar; the sugar with the aid of yeast is converted into alcohol; the alcohol by the aid of a ferment known as 'Mother of Vinegar' is converted into acetic acid. This product is known as malt vinegar and has the color of beer. The products cider, wine, sugar and glucose contain sugar, and by the aid of yeast the sugar is converted into alcohol, then by the aid of 'Mother of Vinegar' converted into acetic acid. These products are respectively known as cider vinegar, wine vinegar, sugar or glucose vinegar, as the case may be.

"The white vinegar known as 'distilled vinegar,' so often called 'acid vinegar,' is made as follows: A grain, generally corn, is ground, mixed with malt and water, which process converts the starch of the corn into sugar. Yeast is then added and the sugar solution allowed to ferment, forming alcohol. Up to this stage the process is identical with the manufacture of malt vinegar. This alcoholic liquid is placed in a still and the dilute alcohol distilled from the mash. This dilute alcohol, by the aid of the 'Mother of Vinegar,' is converted into acetic acid. It will thus be seen that all vinegars contain the same acid, which is acetic acid and that the only difference between them is the flavor or color derived from the source from which each is manufactured.

"The distilled vinegar has been separated by distillation so that it has no color nor flavor derived from the corn. It is as wholesome as any vinegar manufactured and is to be preferred to most of the cider vinegar found on the market.

"The apples which are used in the manufacture of cider vinegar are, as a rule, unfit for any other purpose, while on the other hand, a distilled vinegar is made from sound, clean corn under sanitary conditions and all impurities, if any exist, would remain in the still and not be in the finished product.

"The distilled vinegar being the cheapest vinegar on the market and as pure as vinegar can be made, its sale and use should be commended and not restricted.

"Dealers are hereby warned against receiving short measure, as this department has found numerous instances where a shortage of two to six gallons existed in each barrel. One gallon of vinegar weighs 8.44 pounds.

"As most cider vinegar will contain about 6 per cent of acetic acid, there is a tendency on the part of the jobber to reduce the product with water to near 4 per cent, which is the weakest vinegar permitted by the statute. This process of reduction not only reduces the acidity but the solids as well.

"The following rules, which are explanatory in themselves, have been adopted by this department and distributed among the jobbers:

"Addition of Water.—The dilution of cider vinegar with water naturally reduces not only the acid strength but the amount of other ingredients in proportion to the dilution. A standard for cider vinegar has been incorporated in the statute by the legislature, fixing the minimum amounts of acetic acid, solids, ash, etc. This department will not permit the dilution of cider vinegar with water if such addition brings any of the constants below the standards fixed in the statute. This product may be sold as cider vinegar without any reference as to the dilution.

"Addition of Boiled Cider or Coloring Matter.—The food law provides that a product shall be deemed to be adulterated if it be mixed, colored, powdered, coated or stained in a manner whereby damage or inferiority is concealed, also specifically defines as adulterated, vinegars containing any added coloring matter, and in the opinion of this department the addition of coloring matters, boiled cider, etc., to vinegar is for the purpose of concealing damage or inferiority or to produce an imitation product. The use of such products is, therefore, an adulteration and specifically prohibited by the statute, regardless of labeling.

"Addition of Acetic Acid.—The food law provides that a product shall be deemed to be adulterated if any substance or substances has or have been substituted wholly or in part for the article and in the opinion of this department, the addition of dilute acetic acid is a substitution for the natural acid of cider vinegar.

"Acetic Acid Diluted.—The product made by diluting acetic acid, if prepared by acetous fermentation of dilute distilled grain alcohol, may be sold as spirit vinegar, distilled vinegar or grain vinegar. Said product must be free from harmful impurities.

"Products Obtained by Distilling Wood.—The product made by the destructive distillation of wood, known as (pyroligenous acid) is not a vinegar nor suitable for food purposes."

Kentucky.

Under date of August 1st, a circular on dairy scoring and milk inspection was issued by the Food and Drug Division of the Kentucky Agricultural Experiment Station. It contains much useful information in a highly condensed form. Much attention is paid to bacterial count, and milk producers are warned that bacteriological examinations during the current year will be stricter than hitherto. We quote from the circular:

"The plan of bacteriological examinations for 1912, that is, the examination of samples taken from the different points in the process of production and sale, and the examination of the milk for particular kinds of bacteria shows:

"(a) That milk comes from the udder of a healthy cow free from bacteria of the type found by the usual methods of bacteriological examination. In one instance the writer secured a sample from a cow's teat direct from a sterile tube, and Dr. Pinnell, who is doing the bacteriological work of the division, plated this sample on the same media and with the same methods as are used in the plating of other samples of milk, and found no growths of bacteria whatsoever. Bacteriological workers in several laboratories have been able to secure sterile samples of milk direct from the cow and keep the same for a year or more, free from bacteria.

"(b) That high counts in milk come more particularly from, first, buckets and other utensils that are not clean and that have not been scalded or steamed, or from buckets or utensils which, when properly steamed or scalded, have not been inverted away from the dust or that have been rinsed before using with unboiled and contaminated water; second, from dusty barns, unclean flanks and unwashed and unwiped udders; third, unclean hands and dusty or dirty clothes on the part of the milker; fourth, failure to immediately cool the milk. Cooling checks for a time the further growth of most bacteria and is, therefore, the final necessity in the dairyman's method. Where the above methods are being strictly complied with at every milking, the count is low and the milk is free from such bacteria as those of the *B. coli* group, which group, as stated, indicate manure or fecal infection. High counts are further added to by unclean shipping cans, by long waits at the railroad station and the dumping and rehandling of the milk in city depots, the sale of milk in the streets from open cans, the serving of milk from bulk in hotels and restaurants, and so on."

Michigan.

From Michigan comes a circular that includes interesting details of the work of Dr. M. L. Holm, state bacteriologist, in experimenting with disinfecting sterilizers for milk receptacles, briefly touched on in these pages last month. The report states:

"During the month [July] the laboratory has been conducting a series of experiments in view of determining the practicability of using chlorinated lime for sterilizing milk bottles and other utensils. It has been found that when bottles are immersed, for ten minutes or longer, in water containing two grains of chlorinated lime to the gallon, 99.9 per cent of the bacteria present are destroyed. Such treatment kills all of the organisms of the lactic acid (milk souring) group, as well as the common pathogens which may be milk-borne, including *B. coli*, *B. typhosis*, *B. diphtheria*, etc. The few surviving bacteria belong to the so-called spore-formers and are relatively unimportant.

"The necessity for sterilizing milk bottles and other utensils is appreciated from the commercial as well as the sanitary viewpoint and need not be emphasized here. The most efficient method in use is probably steam under pressure, but such sterilization requires expensive apparatus which may be prohibitive to many small producers and dealers. Chlorinated lime is being successfully used by several cities in the state for sterilizing drinking water, and in the proportion required cannot be regarded as injurious. Used in a proportion of about two grains per gallon of water its efficiency as a germ destroyer is about equivalent to boiling water, and this method of sterilizing utensils commends itself for simplicity, convenience and cheapness. A 10-cent can of average size and standard strength will be sufficient for about 1,500 gallons of water. A chlorinated lime of standard strength will liberate at least 30 per cent of free chlorine, and if the preparation used liberates less chlorine, proportionately more should be used."

Ohio.

Food Commissioner S. E. Strode of Ohio has issued the following bulletin on soaked peas:

"The attention of this department has been called to what

seems to be a very general misbranding of canned peas. Section 12777 of the General Code of Ohio provides that:

"Whoever manufactures, sells or offers to sell 'soaked' goods or goods put up from products dried before canning, without plainly marking them with an adhesive label having on its face the word 'soaked' in letters not less in size than two line pica of solid and legible type shall be fined not less than \$50, if a vender, and not less than \$500 or more than \$1,000 if a manufacturer or packer."

Texas.

The following rulings, under date of August 29th, have been issued by Dr. J. S. Abbott, Food and Drug Commissioner of Texas:

RULING NO. 22—COTTON SEED.

To the Ginners and Cotton Seed Dealers of the State: You are respectfully notified that according to Section 2 of the Texas food and drug law, a food product is adulterated, "if any substance has been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength or if any substance has been substituted wholly or in part for the article."

It is the opinion of this department that cotton seed is a human food, and that the addition to cotton seed of dirt that is taken out of the seed cotton constitutes a violation of this phase of the law.

RULING NO. 23—LINSEED OIL.

To Wholesale Druggists and Paint Dealers: Section 1 of the Texas food and drug law declares that the term "drug" shall include all medicines and preparations for internal or external use, recognized in the United States Pharmacopoeia. Linseed oil is a name recognized in this work on materia medica, and it is therefore a drug even if it be used and sold for the preparation of paints. This department will hold it a violation of the law for any paint dealer or lumberman to sell any adulterated linseed oil, even where it is sold strictly for painting purposes. Three samples of such oil have been analyzed by this department. One of them contained fish oil, another one mineral oils and another one cotton seed oil. Such labels as "linseed oil for technical purposes only" will not exempt the seller from prosecution. Anything labeled linseed oil must be linseed oil.

RULING NO. 24—BUTTERINE.

To the Creameries and Ice Cream Manufacturers of Texas: I saw a letter from a large packing company and manufacturer of oleomargarine a few days ago addressed to an ice cream manufacturer urging him to homogenize butterine and skimmed milk and use the homogenized product for the manufacture of ice cream. This department holds that such a product can not be called ice cream under the Texas food and drug law.

Interesting Food Notes

SOME BREAD HISTORY.

In 1596 rye bread and oatmeal formed a considerable part of the diet of the middle classes of England. During the reign of Charles I, barley bread was used. White wheat bread did not become popular until within the last century.

"ROAST BEEF OF OLD ENGLAND" LOSING FAVOR.

Bacon seems to be even better liked in England than beef. The imports of bacon last year were 4,868,738 hundredweight against 3,863,389 in 1910; whereas the imports of frozen beef were smaller in 1911 (3,420,071) than in 1910 (3,766,878).

FOOD SCARCE IN MANAGUA.

Managua, Nicaragua, is practically cut off from communication with the rest of the world. Food is becoming scarcer daily, as also in several of the cities in the hands of the revolutionaries. At Granada and Masaya, which are held by the rebels, the populations are almost completely deprived of provisions.

WILD RED RICE OF SENEGAL.

In Senegal red rice grows wild. The fields in which it grows are inundated regularly by the River Senegal or by its affluents, and in measure as the tide rises the rice plant rises above the flood. The grain is very red and very dry and hard. It swells in the water and as it swells loses some of

its rich color. It is very nourishing and requires no cultivation.

CHARACTERISTICS OF THE PILI NUT.

The "pili" nut tree grows in the southern part of the Island of Luzon, and nowhere else in the Philippines. It is a large tree, and its seed is described as extraordinarily rich in flavor. All the Americans in the Philippines think it the finest nut grown. When the nuts are roasted, if a lighted match be touched to one of them, it will burn like a lamp, so rich is it in oil.

SAUER KRAUT DAY IN ACKLEY, IOWA.

Ackley, Iowa, gave her annual celebration, officially known as Sauer Kraut Day, August 29th, and it was unusually successful. A sham battle by boy scouts, several street exhibitions, slide for life from the water tower, and other items served to amuse the crowd. One of the new features of the celebration was a contest for king and queen of Sauer Kraut. Dan Lynch and Cora Weber were respectively elected king and queen and were duly inaugurated before the assembled people.

MEAT BURGLARY IN THE EAST.

Burglars in Andover, N. J., ignored jewelry and such trifles and went straight for the ice box of their victim. Their haul was three hams, a leg of lamb, veal cutlets, chops, tenderloin steaks and tenderloins of pork. "With rising prices every ice-box should be covered by burglary insurance. Diamonds seem to be safe in the presence of tenderloin steaks," commends the *New York Sun*.

HOW WOULD YOU LIKE TO HAVE THIS?

Sitophobia, a new disease recently discovered and officially indexed by physicians in the east, has been diagnosed as the complaint of a patient at the County Hospital in Los Angeles, Cal. The ailment is described in simple terms as "the fear of food." George Watterson, a patient at the hospital, is affected by the disease to such an extent that he became hysterical yesterday when the nurse tried to make him eat butter and eggs, two of the food articles for which he has a decided terror.

WE ALWAYS DID LIKE CORNBREAD.

Cornbread is responsible for the good teeth of the Southern youths, in the opinion of Surgeon General Allan Stuart of the United States Navy. He declares that practically no applicants for enlistment in the navy from the South were refused because of bad teeth. The general prevalence of cornbread as a diet is held to be responsible. "The mastication necessary to eat cornbread exercises the teeth and keeps them healthy," said the surgeon. "Healthy teeth make for the healthy man. I made an effort to get cornbread adopted into the navy diet, but it takes southerners to eat cornbread."

"DELIGHTFUL," DESCRIBES ILGONGOT FISH.

Writing of the Ilgongots, a savage tribe of the Philippines, a recent traveler says: "They have spears, bows and arrows and bolos, a more complete set of weapons than most of their neighbors. Fish forms a very large part of their diet. They usually fish from an oblong bamboo raft called a balsa. The man fishes or looks for a likely spot, while his wife poles the raft. A circular net, with weights on the edges, is used by the fisherman. He swings this over his head and lets it fall flat on the water. The weights close the net and the fish are imprisoned. I have never found more delightful fish than those caught in the Ilgongot country."

HILARIOUS INDIFFERENCE IN AMERICA.

An English author in a book entitled, "America Through English Eyes," gives the following description of the way Americans eat: "The strain of invention leads from office desk to restaurant kitchen and brings the strangest assortment of viands on a table that ever wrecked or mocked human nature by poisoning digestion, and its suffering population proceed to eat, drink and poison themselves with hilarious indifference. The cook invents for the doctor, the doctor invents for the patient and the undertaker invents for them all. Yes, America is indeed the land of inventions."

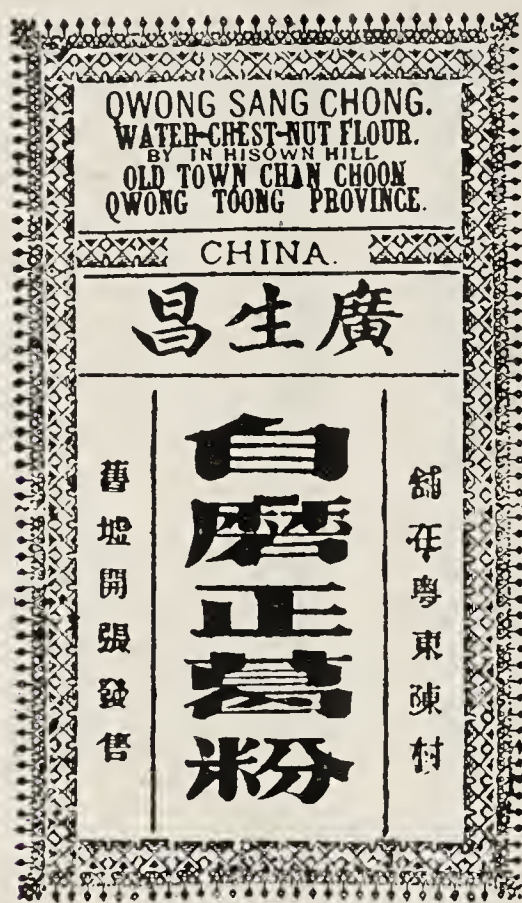
BUTTERMILK AS A LUXURY.

While the popularity of buttermilk as a beverage has increased so enormously that the supply is not equal to the demand in many localities, it is only in Pennsylvania that the price has soared to such heights as to suggest that buttermilk has become a luxury only for the rich, says the *San Antonio*

Express. Physicians have advised that buttermilk carries into the system a supply of lactic acid, an important chemical agent, necessary alike to digestion and the proper muscular action; that it is a medicine as well as a food or assimilator of food. But while buttermilk is drunk for its healthgiving properties its popularity is chiefly due to its allurements as a beverage.

WATER CHESTNUT FLOUR.

A gelatinous or starchy base for confections and pastry is prepared by the Chinese from water chestnuts, of which there are two varieties. To prepare the chestnut flour, the nuts are first dried and then ground. On boiling, the flour becomes a very tenacious gelatinous paste, which may be put



to a variety of uses. The Chinese manufacturer puts the flour up in paper packages holding about a half pound. The illustration is one of the labels. It will be seen that it is printed in Chinese and English. The line "By in his own hill" probably means that the Owong Sang Chow product is from the mill owned by the producer. This label is from the September number of the *Confectioners' Journal*.

DENVER BURBANK PRODUCES NEW FRUIT.

A new berry has been produced by J. C. Wagner of Denver, which leading fruit growers of that section predict will be a decided commercial success. Mr. Wagner, who started with six plants in his experiments, now has 10,000, many of which are bearing, while others are in full bloom. Luther Burbank's rival said that he produced the new berry by grafting the Juconda strawberry plant on the Marlboro raspberry. The fruit in taste resembles both the raspberry and the strawberry. It is like a red raspberry in shape and is the size of a strawberry, but without the tartness of either. The plants grow to a height of two feet. The leaves are unlike those of either of the parent plants.

PARCELS POST AS FOOD CARRIER.

Live chickens, "day-old chickens," eggs and other fragile objects as well as general farm and garden products will be admitted to the parcels post along with other merchandise when it is instituted January 1st.

The schedule is to be so arranged that city dwellers may get fresh eggs and butter, chickens and other produce direct from the farmer by mail. This will be an important feature of the parcels post. Eggs and chickens and produce are carried by the posts of European nations, and the same conditions will apply here. Not only will the government carry these things, but an indemnity will be provided for their loss or damage in transit.

Poultry dealers have sent statistics to the department showing how eggs and chickens may be handled and carried. This is particularly true of the "day-old chick" distributors who

run the biggest hatcheries in the country. A big business in these day-old chickens has sprung up throughout the country.

Eggs are set in incubators having a capacity of as many as 100,000 eggs. The day the chicks are hatched they are shipped. In this condition they can go four days in transit without food or drink, and poultry dealers ship chicks instead of eggs to the fanciers and small raisers.

The receipts of country butter and eggs by mail no doubt will prove an interesting novelty for city housewives.

FOOD VALUE OF THE CURRANT.

The French people have always been first in the art of selecting and preparing of palatable foods.

Away back in 1689, when French refugees bought for a mere trifle the "oxtails" that tanners of Bermondsey, England, had always thrown away as useless, and made from them a soup of excellent quality, the people of other nations have recognized that French cooking deserves to be copied.

As a general rule English speaking people eat altogether too much meat; they would do well to follow the example set by their French neighbors, who make use of foods that stand for nutriment.

The dried currant is among the first of these foods. It is a perfect food as far as furnishing nourishment to the body is concerned, and one has only to partake of a small quantity of currants in order to derive much benefit.

Brain workers as well as those who have to exercise muscular power in the performance of their duties would do well to eat as many currants as they can, either in a dried form or cooked with other foods, such as bread or puddings.

They are not only delicious in flavor, but a small amount of them have been known to satisfy soldiers or other men who are obliged to make long and tedious marches through disagreeable surroundings where food was scarce.

People whose incomes preclude the possibility of obtaining all the meat they think is essential would do well to remember that the dried currant can be bought for much less, and is a splendid food in the way of nourishment and rebuilding the wasted tissues.

MEDICAL VALUE OF SPICES.

The spices are a very interesting group of substances; they are the foundation of a considerable industry, have their medical uses and are of special importance in dietetics, says the *London Lancet*.

Their value resides in their richness in aromatic substances and essential oils. Strictly speaking, they are not foods, but often enough they are essential elements in the diet. Spices have been the subject of classic research, as, for example, in the clever and important investigation which Pawlow undertook as to the psychic influences of food and the value of zest to nutrition.

Spices were shown to arouse appetite and to promote the secretion of the gastric juice, and the role they play therefore in dietetics is a very important one. The medicinal action of some of them is further of value. Allspice, for example, is used as an aromatic, and has been successfully administered for flatulency, the oil gives relief in rheumatism and neuralgia.

The medical uses of cinnamon are well known. Cardamoms are used in the form of a tincture as aromatic and stomachic, and are also employed as a flavoring agent in curry powder, cakes and liqueurs. The application of capsicum and the peppers generally are well known. Cloves are aromatic, carminative and stimulant, and have been used in dyspepsia, gastric irritation and in cases of vomiting.

Oil of cloves is also a popular remedy for toothache. It has also its uses in microscopy as a preservative. The uses of nutmeg are wide, vanilla has an enormous application as a flavoring agent, while turmeric enjoys a similar patronage on account of its bright yellow color and pleasant, musky flavor.

"BOGUS" ICE CREAM IN CHICAGO.

By the terms of a proposed ordinance, Chicago will seek to regulate the use of "syntho" and other cream substitutes in the manufacture of ice cream. Dr. George B. Young, commissioner of health, denounces the practice of using "a compound of oleo oil, neutral oil, gelatine and flavoring matter" and selling the product as ice cream, no matter how healthful it may be. He states that his attention was first directed to the practice by certain milk dealers, who "complained" that they no longer sold cream to certain ice cream factories. The ordinance proposed to regulate this matter will be introduced at the next session of the city council by Alderman H. J. Cermak.

Views of the Press

Meats, Grains and Prices.

Statistical comparisons apparently show that the per capita consumption of wheat in this country has increased in less than a generation from four and a half bushels to about six, a little more or less. The figuring looks conclusive, but the conclusion is hard to accept because our people have always been pretty well fed and they have not only had enough bread, but it has pretty generally been white bread. We have never had a peasantry fed on black bread, like Continental Europe. Furthermore, since breakfast cereals came into use there has been an increase of the use of oats and corn.

If the consumption of wheat has increased one-third the only plausible explanation that occurs to us is that there used to be a great deal of corn and rye bread, much of which has been displaced by wheat bread.

With an increased use of breakfast cereals and an increase at one-third in the per capita consumption of wheat, there ought to be a decrease in the consumption of meat and vegetables. Probably there has been an increase in the use of the latter, for market gardening has been expanding rapidly, and there are far more fresh vegetables in the winter markets than there used to be.

Several of the leading Chicago packers have just made statements regarding the price of their products in which it is pointed out that the increase of stock has been far behind that of population. As one of them puts it, there has been no increase in the supply of meats; while the number of mouths to be fed has increased 16,000,000. Prices have increased indubitably, and this would be explained by a stationary supply and an expanding demand. If it be true that the supply per capita is less than it was the suggestion is that the people spend as much for meat as ever but get less of it. If they are getting less meat it would account for their eating more cereals and vegetables, but the increased consumption of wheat began to attract attention before there was much complaint of meat prices. It is possible that the increased use of wheat led to a reduced use of meat and lower prices, offset by the greater demand of the later increase of population.—*Philadelphia Record*.

When Food Fads Become Fashions.

What is this story of the prune in Chicago? It is remarked that the one-time despised and repudiated prune, the favorite fruit of the cheapest boarding house, has suddenly risen in popularity and fashion in the Windy City. It is said that the fashionable have suddenly gone into ecstasies over prunes, that it is the fad of the day, and a single one of some of the finer kind sell for five cents!

It is well that the prune at last has come into its own proper appreciation. The wise have long esteemed the humble fruit. The physicians have long recommended it, but because it was cheap the public have treated it with contempt, and together with the dried apple it has been the butt of many jokes.

If fashion has indeed turned with favor to the prune its day has come, such creatures of imitation are we.

Once the tomato was but a pretty vegetable curiosity. It was then small and round and was called, for some reason, the "love apple." Then some one ate it and commended it. Then gradually it grew in favor, and by cultivation grew in favor also. Today the tomato is the most popular of garden vegetables, and, although the hotel may charge you a big, round price for it, it is in fact very cheaply produced.

It is said that when the potato was first introduced in France the well-to-do class would have none of it. The king lent his approval to the humble vegetable and at once every one liked it. Let us hope the same good fortune awaits the lowly prune, for it is wholesome.—*Oklahoma City Times*.

It Makes a Difference.

Word comes from Kansas that the wheat growers of the Sunflower State are "all het up" over the enforcement of the pure food law of the state, so far as it touches the farmer. The State Board of Health in its zeal to enforce the law impartially decided that wheat containing half a pound of weed seed per bushel was adulterated and that the man selling it was guilty of violating the law. And now the farmers say that the law is the greatest outrage perpetrated against farmers in years. And they have drawn up a red-hot protest against the law, in terms that remind one of the Kansas of long ago, when the name was associated with whiskers and

farm mortgages, instead of the Kansas of today that suggests bank accounts and automobiles.

Of course, these protesting farmers acknowledge the complete justice of the pure food law so long as it applies to retailers and manufacturers. They admit that the grocer should not be allowed to sell 15 ounces for a pound, nor a miller 47 pounds for a sack of flour; and that the selling of any kind of food containing deleterious substances should be prohibited. Why wheat, the principal food of the people, should be excluded from the operation of the law they do not explain. The farmer hitherto has been allowed to market any sort of trash in his wheat if he could get the miller or grain dealer to take it. He has always done so. That can be the only ground for his objection to the new order of things. Not a valid ground, it is true; but another example of the difference it makes whose ox is gored.—*American Miller*.

CLEANLINESS IN HANDLING FOOD PRODUCTS.

In an address before the convention of the Retail Merchants' Association of Pennsylvania, held at Johnstown on August 20th, State Dairy and Food Commissioner Foust made the following pertinent remarks:

"In the brief remarks that I shall make today in response to the courteous invitation of your President, I desire to center your attention on the subject of 'Cleanliness in Handling Food Products,' particularly as it relates to the grocers' business.

"It is a common saying that 'cleanliness is next to godliness.' A famous German scientist expressed a similar idea when he said 'soap is the measure of civilization.' The American people have always been proud of the cleanliness of their homes. Today they are thinking a great deal about sanitation, and especially about sanitation in the production and handling of their food supplies. Women's clubs all over the land are systematically discussing the subject and demanding a betterment of conditions, and every day the newspapers devote columns to it.

"Our food laws reflect this condition of public demand, and state after state is enacting sweeping sanitary laws in response to it. When the buyer thinks much about a trade condition, the wise seller will try to think and act ahead of him. The kind of goods the grocers handle makes perfect sanitation difficult to maintain; but the general replacement of bulk goods by attractively wrapped package goods has created a condition much more favorable to cleanliness and freedom from contamination. So beautiful are the displays I see in some of your stores that I believe they would make the mouth of a cigar-store Indian water in their presence.

"But some of your fellows in the trade are away below average. In my years of journeying over the state, I have seen dried fruits made the favorite resting place of the store cat; packages of bulk jellies open to the flies; cheese and cheese knives visited by various insects; dirty spit-boxes swarming with flies on their way to unprotected foods; stacks of bread loaves handled by successive buyers and layered with light coats of dust from God only knows where; green groceries stacked on the pavement ready to receive the respects of every passing cur; towels encrusted with the dirt of weeks, perhaps; clerks and deliverymen who looked as though they might never have felt a towel; and collars, cuffs and aprons that had far too long avoided the laundryman.

"It would be a grave injustice to imply that these conditions are the rule; but you know, as well as I, that some of them exist where there is no good excuse for them, and where a fair measure of attention would cause them to disappear. Should not every grocer keep clean the floor of his store-room and, in so doing, use means to prevent floor-dust from getting into his food supplies? Is there any good reason for having a dirty spittoon in any grocery? Why should not bulk goods, especially such as are directly consumed, be kept under covers such as shall protect them from dust, flies and the handling of numerous customers? Why should not the premises be kept clean so as to avoid the breeding of flies, and the number of these filth-carrying insects kept down? Why, with wholesale houses in nearly every town, should stale, shelf-worn goods be carried, with all the risk of insect attack and other spoilage? Why should not clean linen and clean hands be rigidly exacted requirements of every food handler in the grocery store? Why shouldn't every grocery store provide washing conveniences, soap and clean towels to encourage the personal cleanliness of its salesmen? These and many other similar questions your customers are asking.

"I want to say, however, that the sanitary conditions of the grocery have greatly improved in recent years. The general store with its cracker-barrel seats and its box of saturated sawdust centrally placed as the target for the congregated tobacco chewers has almost vanished from the land,

and many better things have come in its place. The grocery-men of Pennsylvania deserve credit for the great improvement they have made. My attitude in addressing you is one of sincere desire that all may do as many have done, and by cordial coöperation with a sincere desire to please and serve well their customers shall remedy sanitary evils where they exist, without my intervention by numerous prosecutions, which the laws require me to make where the food handlers fail themselves to remedy the evils complained of.

"Now, my friends, let me say to you that our department wants you to coöperate with it and it sincerely desires to coöperate with you in all that stands for the best interests of the community and the state at large, in other words, to meet you half way on an equitable basis. Our only hope, as I have already stated, is to be absolutely fair in all matters coming before us for consideration and adjustment, contending only and solely for simple justice between dealer and consumer and for protection of the health and lives of the people of this commonwealth. This and this only is our aim.

"In closing, I desire to most sincerely express the hope that our relations during the coming year will be most cordial, as I certainly anticipate they will be. Let us work together to better conditions not only for the consumers but for yourselves, for I am more than sure that a broad-minded commercial spirit and a wholesome coöperation with our department will be mutually helpful."

PUBLIC HEALTH AGITATION AGAIN OVERSHOOTING THE MARK.

Under the above caption J. Leyden White writes as follows in N. A. R. D. Notes:

"Dr. Thomas D. Wood tells the United States Bureau of Education that out of the twenty million school children in the country fifteen million are in need of the attention of physicians. He says 400,000 have organic heart disease, 1,000,000 have tuberculosis, 1,000,000 have spinal curvature or flat foot, 1,00,000 have defective hearing, 5,000,000 are suffering from malnutrition, 6,000,000 have enlarged tonsils or adenoids, 10,000,000 have defective teeth.

"Is there anybody on earth who has not defective teeth, in the opinion of a dentist?

"A few weeks ago a very prominent surgeon declared in a medical journal that the cutting of tonsils had become a fad that was close to a crime.

"Are you surprised that Dr. Wood's report criticises the present modes of health control in the public schools?

"Do you wonder that when the intelligent reading public sees such statements as those of this report, in the public press, that it is quick to listen to the cries of 'doctors' trust' and 'drug trust'?

"Are not such statements as these responsible for the growing suspicion of all things medical, for the many growing cults of drugless healing? Is the dominant medical organization responsible for such published statement? If it is, is it not overshooting the mark and inflicting injury upon both its members and ours?

"Our attention is called to a newspaper article referring to Dr. Wood's report. It is headed '15,000,000 Pupils Are Ill.' That is false! Every intelligent American parent knows that it is false! And the physicians and druggists of the United States are held responsible for the falsehoods. The only classes who are influenced by belief in such statements are those who are the easiest prey for the makers of the rankest mail-order nostrums.

"Such publications are mighty good advertisements for the 'free by mail,' and other fake medicines (?)"

"Judging from the nature of some of the 'scientific' reports that the present administration is producing, and of the equally 'scientific' comment thereon in the daily papers and the mud-mulling magazines, there is still truth in the old proverb that 'Whom the gods would destroy they first make mad.' Using the word 'mad' as meaning looney.

"The other night the writer was talking to a meat dealer, when a woman approached and asked for veal. When shown the veal, she said: 'Are you sure it is veal? My doctor says that most of the meat sold as veal is goat, and there should be a law to prevent it.'

"The dealer said later: 'The doctors are butting into everybody's business, and trying to get laws to help them boss everybody.'

"There is no doubt but that the meat man voiced a rapidly growing opinion, an opinion that bodes ill for both the medical and pharmaceutical professions. Organized medicine, as represented by the A. M. A., may or may not be directly to blame, but it certainly seems as though it had lost control of its trolley."

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State Food
Commissioner,
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Secretary of the State
Board of Health, Kansas

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An Issue of the Campaign

By Herman B. Meyers.

The present national campaign is singularly free of issues. The three political parties entitled to recognition as such seem to be pretty closely agreed upon all the subjects that could by any stretch of the imagination be called issues. Upon the question of trusts, we find Mr. Roosevelt taking the money of the gentlemen who control the most nearly typical of those organizations and eating out of their hands. Mr. Taft is saying nothing at all either for or against the trusts. Mr. Wilson is going up and down preaching the doctrine of "regulated monopoly," and urging that nothing be done to disturb legitimate business.

The tariff, which has very close relationship to the trust question, seems to interest only a limited number of altruists, who are crying for free trade. Everybody else seems to believe that the tariff should be subject to some reduction, depending upon his point of view and the geographical location of his home.

Out in Quincy, Illinois, the stove manufacturers are perfectly willing to have the tariff on textiles materially reduced, or absolutely removed, if necessary. In Lawrence, Massachusetts, the textile manufacturers are perfectly willing that the tariff on cast and sheet-iron stoves should be scaled down a few cents ad valorem. Up in Michigan, the potato growers are perfectly willing that the import tax on New Orleans molasses should be reduced; while in the Southern

states sugar planters are pointing to the immense sums paid in tariffs on Irish, Scotch and German potatoes last Winter and Spring, and calling loudly for a remedy of this particular evil.

Questions of public policy, like equal suffrage, the initiative, referendum and recall, all have about equal recognition in the various platforms. In fact, these "contracts with the people" are amazingly alike in tone and general purport. The real issue and the real fight

are upon who gets the offices. The most sanguine of the candidates for the highest office of president is Woodrow Wilson. In the language of the sporting fraternity, things have "broke" very nicely for him. It is not intended to make this an article urging the election of any one candidate, or to present the views upon political questions of any individual, it being the policy of this publication to keep its pages free from politics of whatsoever description.

Political facts and possibilities, however,

as news matters, and particularly as affecting the great question of our national food supply, will have due space and discussion, and in view of the considerable possibility of a change in the national administration likely to affect in a large degree the enforcement of the food and drugs act, the AMERICAN FOOD JOURNAL unhesitatingly engages in a few speculations upon the general political situation. It has no sympathies and no affiliations politically, however, and what will be con-



sidered henceforth is intended to be uttered in as calm and dispassionate a mood as if the writer were an observer from some foreign country or a resident of Mars.

The absence of political issues of a pronounced type has made it necessary to create artificial issues. Crises that do not exist are vigorously whipped into shape, press agented and discussed as if they were of the most momentous character. In this classification falls, in our judgment, subjects of public health and pure food, concerning which there has never been and is not now any crisis nor any occasion for widespread alarm or debate in political forums. The agitation of this question at the present time rests upon the assumption that the national food and drugs act has not been properly enforced, or its enforcement has been hampered and its terms abrogated by the administrative authorities who were charged with its enforcement. Outside of three or four questions of major importance, every issue of fact or of law that could be raised under the act has been during the nearly seven years in which it has been upon the statute books thrashed out in the United States courts, and some of the points in dispute have been so thoroughly debated and so definitely adjudicated that there can be no question of their being entirely settled. It is noteworthy that in every suit brought in the courts under the law, the prosecution has been conducted with the utmost vigor. It is a fact that the enthusiasm of the authorities engaged in the prosecution of offenses of so trifling a character as not to be offenses at all, has been so great as to frequently call down upon the head of the prosecutor the ridicule even of those newspaper organs that have been the loudest in their demand for the enactment and enforcement of pure food legislation. In the celebrated Wiley investigation conducted last year by the Moss Committee, much capital was sought to be made of the fact that a large number of cases against persons believed to have violated the food law were placed on an "abeyance register." This register was loudly demanded in the first days of the investigation when it was believed the solicitor for the Department of Agriculture would oppose its introduction, but when it was found that there was nothing to conceal about it, interest in it waned rapidly. The register was merely a record of cases which in the judgment of the solicitor, and sometimes in the judgment of the chief chemist, would not "stand up." They were palpably weak, and to ask a district attorney and a court to give them attention would have been an imposition. Considering the number of very poor cases that were successfully prosecuted under the law, these "abeyance" cases must have been almost absolutely without merit. But the fact that they were not prosecuted, after investigations on the part of the Bureau of Chemistry sometimes covering several months, and after innumerable hearings, has given occasion for a general charge that the food and drugs act was "manipulated" in the interests of certain manufacturers, denominated "poisoners" and "dopesters," and against the interest of the general public. The fact is that the food and drugs act had been nearly made the instrument of the destruction, in the hands of a mad mullah, of important manufacturing businesses.

Upon this statement of facts, or alleged facts, however, Dr. Wiley has created something that doubtless looks to the general public like a political issue. Because upon one or two of the questions at issue under

the food law, a former occupant of the presidential chair, and now again a candidate for the office, created a board or two which disagreed with Dr. Wiley, that gentleman is now charged with working in the interests of the food "dopesters" and "poisoners." Because the gentleman who now occupies the presidential chair, also a candidate for another term, rejected the judgment of Dr. Wiley on one or two questions arising under the food law, he is now subject to the same charges. Dr. Wiley, like Patrick Henry, knows of no way of judging the future but by the past, and having been turned down by both these candidates, sees in the success of either nothing but disaster to his ambitions. It is pretty sure that Mr. Roosevelt, who created the Board of Food and Drug Inspection and the Referee Board of Consulting Scientific Experts, which reversed Dr. Wiley's decisions and curbed his activities, would not extend the glad hand to the late chief chemist, nor would Mr. Taft, who personally reversed the judgment of the doctor on several questions and was finally obliged to dismiss him from the government service, grant any renewal of power to a man so pestiferous as an official.

There remains, then, only the camp of Mr. Wilson in which Dr. Wiley may find a welcome. There has been no loud and insistent call, so far as we know, for this particular individual to inject himself into the campaign. His retirement from public office (he himself calls it a resignation, whatever the facts were) predicated his retirement into private life. As guardian of the ninety millions of American stomachs his duties were ended, and without duties he had no need to feel responsibility. Upon the other hand, there is nothing to prevent a man from taking part in a presidential campaign if he wants to, and campaign lies, by whomsoever told, finally fall into the oubliette of time after they have served their ill purpose. But campaign lies sometimes are difficult of refutation. Properly press-agented and made sufficiently insidious, they may be made to look very like the truth until the damage is done.

Here is a statement appearing in syndicated form over the signature of Dr. Wiley that is almost wholly untruthful—the only true part of it being that Dr. Wiley did actually experiment with a so-called poison squad. He fed the members benzoate of soda in capsules in doses three times larger than normal. This method has lately been condemned even by so egregious a Wiley defender as the *New York Journal of Commerce*, whose editor says that salt in extraordinary doses is injurious, but in the proper quantity it is beneficial, and suggests that civilization is lagging if no new preservatives have been discovered.

"Under authority of Congress," says Dr. Wiley in this statement, "I had carried on extensive experiments with my so-called poison squad and found that certain substances—viz., benzoic compounds, sulphurous compounds and sulphate of copper (bluestone)—were injurious to health. The law conferred upon me as chief of the Bureau of Chemistry the duty of acting as a grand jury and determining whether foods and drugs were adulterated or misbranded. Instead of appealing from my decisions to the courts, as the law requires, the users of these poisons appealed to President Roosevelt. He not only listened to them, but he abrogated the plain provisions of the law, appointed a board not contemplated by the law and directed that these predatory interests might continue their attacks

on the health of the people until this board, unknown to the law, should decide otherwise."

Here are some of the facts, however. The law did not confer on Dr. Wiley any such power as he claims. Section 4 of the food and drugs act prescribes certain duties for the Bureau of Chemistry, but these duties do not conform to the duties of a grand jury, nor is the chief of the bureau specifically mentioned. The decisions of the bureau were not even enforceable except by due process of law, so that no appeal need be taken from them. Appeal is taken from the decisions of courts which are susceptible of being enforced. Instead of abrogating the provisions of the law in appointing the Referee Board of Consulting Scientific Experts, to which Dr. Wiley doubtless refers, Mr. Roosevelt kept very much within the law by directing that the board be a part of the Bureau of Chemistry, and that only funds specifically appropriated for the bureau be used in meeting expenses incurred by the board. He abrogated the wishes of Dr. Wiley, no doubt, who had lived at that time to sixty years and not gotten beyond the viewpoint of a squalling child. He has squalled into the lugs of the people of this nation to such effect, however, that he has actually made a large number of them believe that in depriving him of authority and office they are themselves menaced and actually injured.

Dr. Wiley mentions among the things he carried on "experiments" with sulphate of copper or bluestone. People know bluestone as a caustic while sulphate of copper might not be so familiar. It is used in adding color to green peas, and has a great antiseptic value, so that its presence in foods is preservative. The Board of Food and Drug Inspection has lately decided, upon an unfavorable report by the Referee Board of Consulting Scientific Experts, that its use shall be discontinued in imported foods, in which it was alone used and in which its use had been permitted only upon a diplomatic agreement obtained through the State Department. The question of sulphurous compounds, used both as bleaching agents and preservatives, is touched upon. It is remarkable that Dr. Wiley was party to an agreement to permit the presence of sulphites in fruits, wines and fruit juices imported from France, but it is not remarkable that he should deny it, as he did when he was under investigation, only to be exposed by Mr. John Ball Osborne of the Bureau of Trade Relations of the Department of State.

Political exigencies have given Dr. Wiley a certain value to the adherents of Mr. Taft, for he directs most of his venom against Mr. Roosevelt. Those newspaper organs devoted to the Taft fortunes, then, quote Dr. Wiley almost as fully as do the papers who are under the Wilson banner, omitting only attacks upon President Taft. Hence by judicious selection of localities in which to speak, and by judicious selection of subjects of attack, Dr. Wiley keeps as much in the public eye as any vice presidential candidate and nearly as much as a presidential candidate. Like the bull in the china shop, likely at any moment to step into the next aisle and do more damage, it is wise to conciliate him. Perhaps Mr. Wilson is genuinely glad of Dr. Wiley's support and perhaps the campaign committee looks upon him as a good investment, however cheap he may be on account of his rejection by the other parties. But it occurs to us that Mr. Wilson and his friends, if they have given the subject any thought, must contemplate with dread the possibility that Wiley will be found running up to the trough the day after

election, if the election results favorably to their hopes, and claiming a first choice of the good things. Mr. Wilson treats him with politeness now, not to get his ill-will, and because it is the fashion with candidates to treat even the obvious grafter with cordiality, but he must contemplate the possibility of his success with a certain feeling of dread when he thinks of Wiley and recalls that the two last administrations found him very much of a white elephant.

Dr. Wiley has with difficulty kept the public from learning many discreditable things in his history. These things are about due to "break" as stories for the newspaper boys. There is the ancient "honey" lie; there is his trafficking with the whiskey trust; there is the mystery of his private fortune of \$300,000, gained by twenty years of service to the government at \$5,000 per year; there is the unfortunate story of his unwillingness to go on the stand and testify as an "expert" in the Coca-Cola case; there are the facts of his equivocation in various matters brought out in the Congressional investigation of his acts last year; among other things is his repudiation of his theory of minimum quantities in connection with a certain cream of tartar case brought out by the AMERICAN FOOD JOURNAL in an effort to force a genuine and impartial investigation of his acts as chief of the Bureau of Chemistry shortly before he resigned; and lastly the facts surrounding his resignation, which have never been brought to public attention in their entirety. These things may come up after the election to plague Mr. Wilson if he is elected.

Dr. Wiley is pretty certain to have acted as a special pleader and agent of the sugar trust. All of his actions in connection with sugar suggest it. He has actively opposed the use of saccharin in foods in the face of positive evidence of its harmlessness and its useful properties in the diet of persons suffering from certain forms of diabetes, and in the recent investigation of the sugar trust by a Congressional committee he went on the stand and made a plea for the retention of the tariff on sugar that went farther than a paid attorney would have done. As a special pleader for a monopoly such as the sugar trust, Dr. Wiley will be an embarrassing element if the fact should be harped upon by any of the newspapers or orators opposing Mr. Wilson.

The very fact of his having been investigated by a Congressional committee, even if he was whitewashed by a friendly body, is a circumstance adding discredit rather than credit. The scandal that gave occasion for the investigation arose in Dr. Wiley's own bureau, and the facts charged were proven. President Taft even went to the length of condoning Dr. Wiley's fault, excusing him for the act if he committed it, but expressing the belief that he did not commit it. Dr. Wiley is now exhibiting his gratitude to the President by vilipending him.

Before an audience of women in New York on September 19th, Dr. Wiley declared that the real issue before the American people was whether pure food legislation would be enacted by the next Congress. That is Dr. Wiley's platform, with only one plank missing. The missing plank is whether he will feed at the public trough after March 4th next. Two contingencies must be met to compass that end. Mr. Wilson must be elected, and after his election he must be able to "see" Dr. Wiley. He may profit by the experiences of Mr. Roosevelt and Mr. Taft. He may go even further. In the event of his election, before his

inauguration he may be able to take a little time and examine the subject of pure foods and Dr. Wiley's relation to that subject. He may even look at Dr. Wiley, whom he welcomes so politely now, and find that as an expert he is very greatly discredited, and that partly by his own admissions; as a defender of the stomachs of ninety million American citizens he is a mountebank; as an accused and aggrieved official he was acquitted by a packed jury, but as a worker for special interests like the straight whisky trust and the sugar trust he is a howling success.

Dr. Wiley is a Democrat and an apostate Republican, he announces. He is in the Democratic camp because he was kicked out of the Republican and Progressive camps. He performs like a good wheel-horse now, but after election, if success falls to the Democrats, he will be a heavy burden.

ICE CREAM MAKERS' ATTITUDE ON CREAM SUBSTITUTES AND BUTTER FAT STANDARDS.

The following resolutions, passed by the Executive Committee of the National Association of Ice Cream manufacturers, establishes pretty plainly the position of the members of the association on the question of the use of such products as "syntho" in the manufacture of ice cream:

Whereas, It has come to our knowledge that various mixtures or compounds of milk or skim milk and foreign fats or oils, lately introduced and offered as substitutes for cream, are being used in the manufacture of products that are offered and sold as and for ice cream; and

Whereas, There is no warrant in the custom and usage of the trade, or in custom and usage among those who make ice cream in their own homes, or in any rule or practice within the common knowledge of the times, to give the name of ice cream to any product of which any compound or mixture of the character described in the first section of this preamble is an ingredient; therefore, be it

Resolved, That we, the directors of the National Association of Ice Cream Manufacturers, condemn and denounce as fraudulent the sale as and for ice cream of any product in which there is present any beef fat, or oleo fats, or cottonseed oil, or any fats or oils other than those natural in milk and eggs and in materials used in ice cream for flavoring purposes only, such as cocoa or chocolate, nuts, and some fruits; and, further be it

Resolved, That we offer to co-operate with food control officials, or any of them, in the prosecution of any person, firm or corporation selling as and for ice cream any product in which there is found any fat or oil other than those natural in milk and eggs and in materials used in ice cream for flavoring purposes only, and to that end tender the advice and assistance of our counsel, Walter Jeffreys Carlin, Esq., of No. 2 Rector street, New York.

In a statement made public at the time the resolutions were passed, it was stated that the association's attitude on the question of butter fat standards for ice cream were not affected by the resolutions, but that the organization stood for antagonism to arbitrary standards. The platform of the ice cream makers belonging to the association is expressed in the two words: "No standards." In a statement to the trade, made nearly two years ago, Mr. Walter J. Carlin, attorney for the association, touched on some phases of the butter fat standard situation in these words:

"Of course, there is little doubt that Congress will again refuse either to make standards or delegate the power to make them. And even if a commission, as suggested by this resolution, was appointed, there is no reason to believe that they would attempt to standardize ice cream on a butter fat basis. So, as far as butter fat standard is concerned, I think we may say that the test on interstate shipments will be, 'What is ice cream,' and this test will, in my opinion, be quite satisfactory to manufacturers.

"As to state standards, the statutes purporting to establish them are so varied that it is also impossible to summarize them. We have statutes which on their face establish standards ranging from 4 per cent butter fat in Maryland to 11 per cent in Missouri. Where the standard is not set forth in the statute, a commissioner is sometimes empowered to

adopt a standard. When this occurs, the standards so adopted vary, ranging from 8 per cent in Indiana to 14 per cent in Kentucky. There are other methods of adopting standards, but the above will serve as an illustration. It may also be proper to say that no state has a higher standard than 14 per cent, while many important states—for example, Massachusetts, New York, Ohio, Connecticut and New Jersey—have no standards. In states where there is no standard and no authority is given the commissioner to adopt one, the commissioner sometimes issues a standard without authority, giving us the class of 'unauthorized standards.' Unauthorized standards have no force, being 'promulgated' without warrant of law. In my opinion the so-called standards of the states of Colorado, Washington and Oklahoma are unauthorized."

GOVERNMENT PROSECUTOR RESIGNS.

Alfred Roy Hulbert, Assistant United States District Attorney for the Northern District of Illinois, at Chicago, has tendered his resignation of that office to Attorney General Wickersham, to take effect November 1, 1912, when he



ALFRED R. HULBERT.

will open an office in Chicago for the general practice of the law.

Mr. Hulbert was appointed on March 1, 1910, on the recommendation of Edwin W. Sims, former United States District Attorney, and was given full charge of the numerous cases brought by the government under the Federal food and drugs act. It became his duty to pass upon the work of the officials of the Department of Agriculture relating to these cases, to prepare the same and to prosecute many violators. Mr. Hulbert stands for fair play and impartial treatment. His sensible and practical interpretation of the food and drugs act, and his courteous suggestions to all manufacturers and shippers with whom he came in contact, has been proverbial. He has, however, had a wide experience, and has appeared as prosecutor of numerous cases involving violations of other acts of Congress, including post office robbery, internal revenue, customs, meat inspection and white slave cases.

Green Vegetables and Their Uses in the Diet

By C. F. Langworthy.*

One of the marked differences between the daily fare today and that of fifty years ago consists in the increased supply of green and succulent vegetables, a class of food used, as their names imply, for their refreshing and palatable qualities more than for their total nutritive value. Not many years ago the winter's supply of vegetables in all southern countries was limited to root crops and a few other staples, such as onions and cabbage, which could be kept in the cellar in comparatively good condition. New and improved varieties, better methods of cultivation, improvements in transportation and storage, the great development of market gardening under glass, and the development of the canning and preserving industry, have made succulent vegetables common throughout the year and available in one form or another for almost every family.

This group of vegetable foods is varied in character, including leaves, stems, and stalks, potherbs and seed pods, and many fruits, or in general, those parts of plants in which water is abundant rather than those like the seed or the starchy root in which the plant has laid by a compact store of nutritive material for its future use, or which, like the shells of fruits, cornstalks and the trunks of trees, have passed the active growing stage and become rigid by the thickening and toughening of the walls of the plant cells.

As regards their original habitat, common succulent vegetables represent nearly all quarters of the globe. Although a number of them have been used for centuries as human food, the majority have come into common use within comparatively few years.

Okra, a vegetable long known to gardeners, is stated to be a native of Africa, and was cultivated more than a thousand years ago. Asparagus also has been known for centuries. Rhubarb was introduced into western Europe as early as the tenth century, while tomatoes and some of the squashes, as well as potatoes, Indian corn, and some types of beans, are of American origin and found their way into Europe not long after the discovery of this country. Tomatoes slowly gained recognition for table purposes, having long been grown as ornamental plants only. Indeed, their general use as vegetables dates back hardly more than a generation or two ago. It is perhaps needless to say that attributing cancer to the use of tomatoes, as was formerly done, is, like most such ideas, regarded as without foundation.

New Zealand spinach, udo, dasheen and others might be mentioned as rather recent introductions. The Department of Agriculture has always endeavored to secure new varieties and new and promising food and forage plants from different parts of the world, and has added much of great value to the list of farm crops and garden plants. As garden vegetables have been adapted to new conditions, either by centuries of cultivation or more quickly by the plant breeder, appearance and original characteristics have been modified and often greatly changed, and new and improved varieties especially adapted for table use have been developed.

In general, it may be said that although many wild plants are used as potherbs and in similar ways, by far the greater proportion of this class of foods comes from farm and garden, as is the case with other groups of food plants. In other words, man has found it desirable to control his food supply by cultivation rather than to depend upon the uncertain natural supply, though he still uses the natural supply in a limited way to supplement the cultivated products, often prizing the wild plant or fruit because of some special quality or delicate or unusual flavor.

If the green succulent plants used as vegetables are classified according to the parts used they fall into such groups as (a) leaves, stalks, stems, and leafy heads, of which spinach, celery, asparagus, and cabbage, respectively, may serve as examples; (b) flower heads and flowers and a number of fruits; and (c) seed pods and seed vessels, as string beans, okra, and green peppers.

Besides the well-known use of leaves like lettuce and spinach for salads and potherbs, there are others which are of some interest because they are unusual. Thus, grapevine leaves, which find little use in the United States except for

covering pickles, to which they are supposed to impart a green color, are commonly used in Turkey for making a number of dishes. For instance, little rolls of highly seasoned forcemeat wrapped in grape leaves and cooked until tender are a characteristic dish at wedding feasts. In the southern United States tender sassafras leaves, dried and ground, are used like okra or gumbo to thicken soups, and many other field and garden plants are occasionally used to impart flavor or color or in some similar way.

Under flower heads may be grouped such vegetables as cauliflower and globe artichokes, which are common vegetables. Rhubarb flower heads, though seldom eaten in America, are sometimes cooked when well developed, but before they have begun to unfold. Flowers find little use as foods in the United States, though a number of sorts are of considerable importance in the tropics. Nasturtium blossoms, like the leaves and tender stems of this plant, are now and then added to salad or used in similar ways. Unopened squash blossoms, which are used for making fritters in Italy, are also used in a limited way in the United States, as are elder blossoms, this usage coming to us from Germany. The unopened buds of marsh marigold, dandelion, and many other flowers are cooked with the leaves as potherbs, and the green unopened buds of capers, pickled, are used as seasoning.

If succulent vegetables are grouped according to their uses, some such division as the following would result: (a) Salad plants which are eaten uncooked either with or without dressing; (b) potherbs or "greens"; (c) vegetables used chiefly for flavoring, either raw or cooked; (d) succulent vegetables or fruits which are cooked and used in making a variety of dishes; and (e) leaves for making table beverages.

Of salad plants the most common is lettuce, ranging in its different varieties from flat, open leaves to close leaf heads like cabbage in form. Other common salad plants are chicory in several varieties, cress and celery. Salad plants, as the name implies, may be eaten with salt alone, but are more commonly mixed with salad dressing made of oil or other fats, as cream, and acid, as vinegar or lemon juice. There are a number of wild plants used as salad; for instance, young dandelion leaves, peppergrass, and water cress.

Just as lettuce may be called the typical salad plant, so spinach may be called the typical potherb. Other well-known garden plants used like the latter are cabbage and cabbage sprouts, Savoy cabbage, Chinese cabbage, kale, collards, turnip tops, beet tops, chard, mustard, and the leaves of dasheen, which, though of recent introduction, is coming to be an important food plant in the United States. Other vegetables similar to potherbs in the way they are used, though perhaps not commonly so classed, are asparagus, a variety of fennel, hop sprouts (well known in Belgium and France, though little known in the United States) and bamboo shoots, much used in the Orient, and which canned are not uncommon in American cities and towns where Chinese foods are on sale. Many wild plants are used as potherbs, including among others, dandelion, yellow dock, pigweed, chickweed, mustard shoots, marsh marigold (sometimes called American cowslip), purslane or "pusley" and cactus leaves and stalks, which are used in southwestern United States and more commonly in Mexico, while such things as poke sprouts and young milkweed shoots are used like asparagus. Tender blackberry shoots are used in the same way, as are also the tender sprouts of brakes or other ferns, such usage being rare in the United States, though fairly common in Japan. Other green vegetables which resemble potherbs in that they are very commonly prepared for the table by cooking them in water until tender are green peas, green cowpeas, tender beans of different varieties, edible podded peas, snap peas, tender green cowpea or field-pea pods, and green corn, a vegetable which is distinctly American and perhaps more generally liked in the United States than any other green vegetable.

As regards leaves and plants used for seasoning, perhaps the most common in the United States are onion tops, celery leaves, chives and parsley, which, as everyone knows, is also a particular favorite as a garnish. Wild garlic leaves are

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sometimes used, as is borage, which has a flavor like that of cucumber. The thrifty housewife often dries parsley and celery leaves for the winter use. Of wild plants, aromatic wintergreen and princess pine have been used in a limited way in times past, but are now almost forgotten for home use, except as they are gathered by children.

Dried leaves of seasoning herbs, as sage, summer savory, thyme, and bay leaf, are used in most homes, though perhaps less commonly than was once the case. Such seasoning should be used judiciously, as a delicate rather than a strong flavor is what is desired.

Some of the fruits used as succulent vegetables, for instance squash and eggplant, are seldom eaten raw; others like cucumbers are more commonly used raw than cooked; while others like tomatoes and green peppers are very commonly used both raw and cooked and in a great variety of ways.

The use of leaves for making beverages is a very ancient one and it would be difficult to hazard a guess as to the time when tea leaves were first gathered for this purpose. It is a common opinion that the curing of tea leaves is little more than a drying process, but this is not the case, since the chief object is to secure a specific kind of fermentation which develops aroma and flavor. Variations in curing and handling the tea leaves are very largely responsible for the flavors of different brands. A plant which is perhaps next to tea in importance, in this connection, is Paraguay tea, or mate, which finds such extensive use in South American countries.

Numerous wild plants are sometimes used as substitutes when tea cannot be procured. The early settlers in the United States used a number of these wild plants and leaves, such as New Jersey tea, snowberry (which Thoreau regarded as an agreeable substitute for black tea), and sweet fern, which was known in colonial times as "mountain tea."

Green vegetables, like lettuce and other leaves, owe their color to chlorophyll, the green coloring matter of plants, which plays an important part in their growth. When plants are blanched the green undergoes changes and disappears, the plant becoming yellowish and finally white, as in blanched celery. The purple and red leaves of some cabbages and beets owe their color to other compounds somewhat like chlorophyll, present with it or in place of it. The case is much the same with the red, yellow, or other color of fruits used as vegetables, the coloring matter being something which the plant builds up as a part of its life processes.

The coloring matter of leaves, flowers, and plants is often squeezed out or extracted and used in cookery. Thus, spinach yields green, the saffron of Europe yellow, and violets their characteristic color.

Green and succulent vegetables owe their flavors, as do other vegetable foods and fruits, to the presence of citric acid and other acids and their salts, to sugars, to specific compounds such as essential oils, and to bitter substances or other complex chemical compounds, most of them in solution in the plant juices. Tannin, which is present in many unripe fruits, causes an astringent or puckery taste which commonly disappears or becomes milder as the plant ripens.

Not infrequently a family of plants is characterized by the presence of chemical bodies of the same or similar flavor: thus cabbage, kale, cauliflower, mustard and other cruciferous plants contain sulphur compounds of pronounced flavor. The same may be said of chives, onions, leeks, and related plants. In celery the characteristic flavor is attributable to the presence of a volatile oil-like substance.

The green succulent vegetables which are used for salads and as potherbs and in similar ways could be grouped according to their flavor. Most of them are bland in flavor, as spinach; some are more or less bitter, as chicory and dandelion; while others are sharp, as cress and peppergrass; sour, as is sorrel; or aromatic as mint and spearmint. Those of bitter flavor are usually made milder by cooking. It is self-evident that it is the possession in abundance of characteristic flavor which makes such green vegetables as chives and celery leaves prized for seasoning. Many blossoms are also prized for this quality—for instance, rose petals, orange blossoms and violets.

The stage of growth at which leaves, stalks, and similar potherbs and salad plants are best for the table depends mainly upon two things—the condition of the cellulose which makes up the framework of the plant and the presence of the chemical compounds which determine flavor. A certain amount of cellulose is desirable in food; but if a plant has become too old and tough, the digestive juices do not so readily reach the nutritive materials inside the plant cells, and furthermore, such cellulose, if too abundant, is believed to be a cause of intestinal disturbances. Then, too,

the flavoring bodies frequently become so plentiful in older plants that they are too bitter or too acid to be acceptable. Leaves and stems are usually best when young. The cellulose is then tender and the flavor delicate.

Blanching—that is, covering all or part of the plant in such a way as to exclude light for a time—is a device by which the plant is encouraged to develop size without toughness and become flavored by lessening the chlorophyll and also flavor bodies which are present apparently in the chlorophyll cells. In the case of white asparagus, which some persons insist is better than the green, the shoots grow up through a deep layer of soil or mulch, and as they reach the surface are cut near the root with a special knife. The flavor of asparagus which is grown above the ground is different from that of the blanched asparagus and to many palates seems to possess more of the delicate flavor suggestive of green peas.

With some of the fruits which are used as vegetables conditions are frequently the reverse of those observed with leaves and stems, the cellulose in the immature fruit being hard and tough and the flavor too sour, owing either to an abundance of acid or lack of sugar, or too astringent, owing to the presence of tannin. Such immature fruits may be injurious as well as disagreeable in flavor.

As fruits of certain types ripen the cellulose softens and the flavor increases, sweeter and more palatable compounds replacing or masking the flavors which predominate in the unripe fruit. Thus, tomatoes find their principal uses when fully ripe. Other fruits, used as vegetables, grow coarser as they ripen; for instance, cucumbers and turban squash, which are considered best while young and crisp.

Freshness is almost as important an element in table quality of vegetables as is tenderness. The leaves, stalks, fruits, etc., when gathered for the table are still living things and the ferments in their tissues which are concerned in their ripening processes are still active and may continue so for a long time. The loss in sweetness after gathering, the deterioration in flavor, and similar changes are without doubt attributable to the action of these ferments, which cause a loss of the plant sugar, or modify the flavor in some other way.

The wilting of vegetables is due to a loss of water by evaporation, and, as everyone knows, it may often be prevented by keeping the leaves, stalks, etc., moist, while those which are already wilted may be freshened chiefly in appearance by putting them in water. Variations in the botanical structure of the surface and other parts are responsible for the differences which green vegetables show in this respect, those characterized by a more impervious surface keeping unwilted longer than those with opposite characteristics.

Wilting and other undesirable changes are less pronounced at a low than at a high temperature, and this fact is taken advantage of when the housewife keeps her fresh vegetables in good condition in the refrigerator and when the dealer holds them in the cold-storage warehouse. The fact that the plant continues to live for a time and carry on its life processes after picking explains why it is that vegetables or fruit picked underripe reach market in a ripened condition when shipped long distances or kept for a time in cold storage.

Withered or badly wilted vegetables or those which have lost their fresh color and become yellowish or brown should be avoided, as they have undoubtedly lost flavor and quality. Those which have begun to decompose should be rejected, particularly if they are to be eaten raw, as the molds, bacteria, etc., which have found lodging on or in the plants and developed may be in themselves a cause of illness or may be accompanied by other microorganisms which will have such an effect. Cleanliness in handling, marketing, storing, and preparing food for the table is, in all cases, very important, but is particularly needed in the case of various green vegetables or any other foods which are eaten without cooking. Such vegetables should always be looked over carefully, all bits of foreign substances removed, and then carefully washed in a number of waters. The hasty rinsing under the spigot which too often serves the purpose with lettuce leaves seldom frees them from sand and is less likely to remove other undesirable material if present.

Most salad plants and similar vegetables grow near the surface of the ground, and it is not surprising that they should be accidentally contaminated with earth, etc. Furthermore, like all green plants, they are subject to insect attacks and may be the lodging place of insects and insect eggs. Sometimes vegetables are dangerous owing to the fact that the soil has been fertilized with improper material; or in the case of such a vegetable as watercress, because it has been grown in contaminated water. If possible, vegetables which are to be eaten raw should be selected

which are known to have been grown and marketed under good conditions.

Many plants are handled in market under such conditions that they are exposed to street dust, dirt and other possibilities of contamination. That such contamination, when it exists, is actually dangerous as well as disagreeable, is evident from the results of examination, which show that vegetables or foods exposed to street dust or those handled in an improper manner are commonly contaminated with micro-organisms, very often including those which may cause typhoid. The safest course for the housewife is to purchase her supplies, particularly those which are used without cooking, from dealers whose goods are handled in a cleanly way. Under all circumstances the foods to be eaten raw, as has been said, should be thoroughly washed in a number of waters, so that dirt, dust or other impurity on the surface may be removed.

Heat, as everyone knows, is a sterilizing agent, and thorough cooking will destroy bacteria if they are accidentally present. Nevertheless, the housewife who is at all fastidious will not dispense with washing vegetables or other foods, even if they are to be cooked.

Many of the succulent vegetables, in spite of their solid appearance, contain a larger proportion of water than does milk. Their value in the diet, therefore, and they have a decided value, lies not in any large quantity of nutrients, but in small quantities of special materials which they provide and the bulk which they give the diet, and also in their appetizing qualities, their flavor and appearance, and the variety which they make possible.

The amount of protein (or nitrogenous material), fat, and carbohydrates (sugars, starch, and cellulose) contained in succulent vegetables are much smaller than in staple foods such as bread, meat, and cheese. In general, it may be said that from 85 to 95 per cent of the weight is made up of water, 1 to 2 per cent of protein, less than 1 per cent of fat, 5 to 10 per cent of carbohydrates, and less than 1 per cent to 2 or 3 per cent of mineral matter. Their fuel value is correspondingly low, ranging from about 80 to some 300 or 350 calories per pound.

The mineral matter or ash which is found in vegetable foods, like that in other foodstuffs, is varied in character, potassium, iron, phosphorus, sulphur, and other mineral elements being present, some of them in combination with citric acid or other organic acids. The proportion of some of the mineral substances which the body requires is more abundant in fruit and succulent vegetables than in most other sorts of food; and if for any reason the body lacks these foods for a long time, disease may result. It is well known that scurvy, which was so common on old sailing vessels, where the diet was usually made up very largely of bread and salt meats, was prevented or relieved by the addition of an abundance of green vegetables, potatoes, or other fresh foods to the diet.

The form in which mineral matter occurs in foodstuffs has a decided bearing upon the use to which the body can make of it, and it seems certain that mineral matter occurs in satisfactory combination in green vegetables and similar foods. It is commonly said that spinach contains a relatively high percentage of iron and that this is one reason why it is a valuable article of diet. Carefully conducted experiments as to the source of iron in the diet, undertaken as a part of the nutrition investigations of the Office of Experiment Stations, indicate that such is the case and that the proportion of iron and other ash constituents in the diet can readily be increased by the use of an abundance of such vegetable foods.

The insure the normal and regular passage of the food through the lower part of the digestive tract a certain amount of indigestible but nonirritating material seems desirable, and this is provided by such substances as the cellulose which forms the framework of vegetables. Some solutions of mineral salts have the property of hastening the passage of food through the intestines, and it seems very probable the succulent vegetables owe their well-known laxative properties in part at least to the specific nature of their juices, which are, of course, a solution of small amounts of mineral matter, plant acids, soluble nitrogenous matter, sugars, etc., in water.

As regards the completeness with which the nutritive elements present in green vegetables are assimilated, little experimental evidence is available. It would seem safe to say, however, that they are fairly well assimilated, 70 per cent of the protein, over 90 per cent of the total carbohydrates, and over 80 per cent of the crude fiber present being retained in the body. Similar values for the digestibility of total carbohydrates and crude fiber apply also to some dried

vegetables. Regarding the ease of digestion, much apparently depends upon the condition of the vegetable when it is eaten. If its cellulose is too abundant, or fibrous, old or tough, vegetables may prove irritating to persons with a delicate digestion. Immature or overripe vegetables, particularly if eaten raw, may also cause digestive disturbances, perhaps more often ascribable to bacteria accidentally present than to chemical constituents. It is safe to say that with persons in good health, with ordinary digestive powers, vegetables in good condition do not cause digestive disturbances, but, on the contrary, more often exercise a favorable influence.

Green vegetables are very abundant in the United States and, in season, are comparatively inexpensive. It would seem that their use is more common in this country in families of all circumstances than is the case in some other countries and this is surely an advantage.

Popular statements are numerous to the effect that this or that vegetable is indigestible, or that some particular kind is very nutritious or is possessed of some special virtues; yet there is very little accurate evidence on which to base such assertions, and, generally speaking, they can be traced to beliefs of earlier times.

The medieval herbals are full of curious statements regarding the curative or other marvelous properties of various plants, and not more than a century ago the capable housewife reckoned a knowledge of their medicinal virtues among her useful accomplishments. It is true that some green plants used as food—for instance, dandelions, dock or chicory—contain bitter principles or other substances which have been used in medicine, and that the milky juice of lettuce contains constituents with physiologically active qualities. However, when due allowance is made for all such facts, it is still true that for most healthy persons the benefits which come from eating green vegetables in abundance are due to their general qualities and not to specific medicinal virtues which some of them may possibly possess in small degree. It seems more than probable that such tonic virtues as those attributed to some of the green plants used as spring medicine were really ascribable to the fact that they were a very welcome addition to the winter fare and made the food more appetizing.

The methods followed in preparing vegetables for the table are numerous, though, as is often the case in cooking, many of the dishes differ in detail rather than in principles followed. Most of the numerous recipes which are found in books and other publications devoted to cookery come from the housewife's experience or the expert cook's attempt to present materials in an appetizing form.

Knowledge of the changes which cooking produces in food materials is usually drawn from three sources—common household experience, the accurate observation of processes necessary in establishments where food is prepared on a commercial scale and the experiments made for more theoretical purposes in research laboratories. In the case of succulent vegetables much less definite information has come from the second source than with such materials as bread, crackers, and other cereal preparations, probably because the succulent vegetables are not prepared on a large scale, except in the canning industry. As regards the third source, information is limited for all classes of foods, since the chemistry of cookery has not as yet received the attention it merits.

Very few of the problems of vegetable cookery have, in fact, been carefully studied by laboratory methods. References are occasionally found in chemical literature to the presence of sulphur compounds in the steam from cooking vegetables such as cabbage and a great variety of others, to the changes which carbohydrates and other food constituents undergo when cooked with moist and with dry heat, and to similar matters, but apparently few systematic studies of the cooking problem have been undertaken from such a standpoint. It is undoubtedly true that much that is of interest as well as of value will be learned when the chemist turns his attention to work of this kind.

Some of the nutritive material present in green vegetables may escape into the water in which they are cooked, and if the water is discarded this means a corresponding loss. In experiments made in connection with the nutrition investigations of the Office of Experiment Stations it was found that when cabbage which contains seven and one-half pounds of dry matter per 100 pounds of fresh, green substance was cooked in water, one-half of the mineral matter and over one-third each of the carbohydrates and nitrogenous material present in the dry matter were dissolved out. Such a loss seems inevitable with boiled cabbage, etc., unless the green vegetable is cooked in such a manner that the water in

which it is boiled is also used. This is frequently the case with cabbage when it is cooked with corned beef or ham in some similar way, or when such green vegetables as spinach are cooked in so little water that there is only a small quantity, if any, to drain off before serving. Recent French experiments made with cabbage, asparagus and other succulent vegetables showed that, on an average, 30 per cent of the total mineral matter was extracted when the vegetables were cooked in water for 20 minutes.

On the basis of such facts as the above it has been suggested that green vegetables should always be steamed in their own juices instead of boiling them. If the total amount of such foods we could secure were very limited, or if there were no other foods from which the body could secure mineral matter, the question might be one of greater importance. Under present conditions it seems safe to say that the housewife who provides a varied diet is justified in selecting the manner of preparation which suits the taste of her family.

When potherbs and similar green vegetables are prepared for the table care must be taken that they are not overcooked, as it is commonly conceded that this entails a loss or deterioration of flavor, while it also injures the appearance, the green color turning yellow or brown. So characteristic is this change that the loss of green color may be taken as a measure of the overcooking. Spinach cooked until it is brown, overcooked asparagus, a vegetable whose delicate flavor is very commonly thus spoiled, and tender green beans and green peas cooked so long that they become yellow, no longer possess the delicate and characteristic flavor which makes them so popular. If such vegetables as cabbage and cauliflower are cooked just long enough to make them tender but not long enough to make them brown or yellow, it is believed that they are digested without trouble, while if cooked until they are yellow or brown they too often deserve their reputation as the cause of digestive disturbances. In some cases the length of time which foods are to be cooked seems mainly a matter of preference. Thus, many believe that the tomato is improved in flavor by long cooking; some prefer green corn cooked only long enough to make it tender; while others consider that corn, particularly when cut from the cob, gains an added flavor by long, slow cooking.

Blanching green vegetables during growth in order to make them tender has already been referred to. The same word is sometimes used to describe a cooking process very common in France. The vegetables are cooked in rapidly boiling water and when they are just beginning to get tender are plunged into cold water, chilled, and drained. They may then be prepared for the table immediately by further cooking and seasoning, or they may be kept cold and finished later when needed. Expert cooks believe that blanching improves the quality of the vegetables and, furthermore, that it has a decided advantage in that the preliminary cooking of such vegetables as cauliflower can be done whenever convenient, and the cooking completed in a few minutes, just before the vegetable is served.

The problem of preserving green vegetables is fundamentally the same as in the case of fruits or other food materials, namely to destroy any micro-organisms causing fermentation or decay which may be present, to hinder or prevent the subsequent entrance of such micro-organisms, and to accomplish this without producing undesirable changes in the flavor and appearance of the food. Green vegetables are commonly preserved either by drying or evaporating them until there is so little moisture left that the micro-organism can not survive or grow, or by sterilizing the materials by heat and preventing the entrance of micro-organisms, as in canning.

Many housekeepers have long been in the habit of "putting up" vegetables for family use, and nowadays canning on a large scale for sale is growing in importance as a home industry, not only on farms, but anywhere that a cheap supply of fresh vegetables can be obtained. When canning is done on a considerable scale, even in private houses, regular canning outfits often replace old household appliances. As every one knows, the commercial canning of vegetables has developed in half a century into a very important enterprise. Canned vegetables keep well and when of good quality are wholesome and palatable additions to the diet. Since they have been cooked during the process of manufacture, they may be quickly prepared for use.

Drying was a common domestic process in the days before the canning industry was developed, but gradually fell into disuse because the old methods as used with vegetables did not produce a very satisfactory result. In recent years improvements have been introduced by which water is re-

moved rapidly and at a temperature which does not destroy flavor, and dried and desiccated vegetables are now common commercial products. When slowly soaked until they regain the quantity of water which was removed from them and then cooked in the usual ways, they have much the appearance and flavor of fresh vegetables. Since the dried or evaporated vegetables, if compressed, take up comparatively little storage room and are not heavy in proportion to their bulk, they are especially desirable when space is limited or transportation difficult.

It seems probable that with the increasing improvement in methods of production and transportation succulent vegetables will play an increasingly important part in American diets.

They do not add greatly to the total nutrients and fuel value, except in relation to the cost, but they do increase the wholesomeness of the diet in three ways, namely, by supplying it with necessary mineral matters less abundant in some other common food materials, by providing bulk desirable for the normal digestion of the more concentrated food materials, and by making the diet more varied and attractive. The last is probably the most important point in the ordinary mixed diet of persons in normal health living under the usual conditions. Moreover, green vegetables require relatively little preparation, many need only to be washed before serving, and those that are eaten cooked are usually better when simply prepared. The great number of fancy foods, pies, cakes, and so on, which American housewives so often consider necessary, are often referred to as showing their ingenuity in providing variety from a few staple materials. They can get much greater variety without anything like as much labor by utilizing such fruits and vegetables as those discussed in this article.

N. P. HULL SUCCEEDS THE LATE GEORGE M. WHITAKER.

The National Dairy Union has secured the services of N. P. Hull of Diamondale, Michigan, as the secretary and executive officer of their organization. He fills the vacancy occasioned by the death of George M. Whitaker, and we



N. P. HULL.

wish to urge a strong and unanimous support for him from the united dairy interests.

Mr. Hull is a dairy farmer, master of the Michigan State Grange and a former Assistant Food and Dairy Commissioner of his state. His appointment is said to give much satisfaction to the membership of the National Dairy Union.

The Cost of Living and the Food Law

By Edward N. Eaton, M. S.

[Perhaps no clearer or more logical presentation of the connection between the high cost of living and the enforcement of the food and drugs act under the administration of Dr. Wiley has been made than was made by Dr. Edward N. Eaton, former state chemist of Illinois, in an address before the Hawkeye Fellowship Club in the Auditorium Hotel, October 1st. We append the address in full.]

My subject divides itself, naturally, into two parts—first: the natural, justifiable increase in the cost of pure food over adulterated food; second, the unnecessary, unjustifiable increase in the cost of food caused by the enactment of the national food and drugs act of June 30, 1906, and by the methods employed for its enactment and enforcement.

The term "pure" in connection with food laws is misleading, and in a sense a misnomer. The so-called pure food laws are actually in the main laws penalizing the misbranding of foodstuffs and the definition of adulteration in the food laws has been stretched to accommodate that new meaning. There are some instances, however, where food laws do encourage purity in foodstuffs, but on these I will not elaborate at this time.

In regard to the effect of the enforcement of food laws on prices, it is scarcely necessary to argue that butter will cost more than oleomargarine, maple sugar more than brown sugar, and honey more than corn syrup, etc., or the pure article more than any mixture of these cheaper foods with the genuine article. It is equally patent that milk diluted with water, or buckwheat flour attenuated with starch, may be sold cheaper than the undiluted article. The undoubted effect of all these substitutes, mixtures and compounds sold for genuine goods is to lower the selling price of the imitated and increase the price asked for the surrogate goods above their actual value. I will quote Hon. Ed. K. Slatter, Dairy and Food Commissioner of Minnesota, in 1906, on this point:

"Every honest manufacturer and dealer is an advocate of pure food laws and their proper enforcement. The dealer who is striving to build up a demand and reputation for his goods is enabled to do so because his competitor's goods are compelled to show up in their true light and appeal to the consumer for just what they are. Good quality demands a good price and all grades are thus placed upon a proper competing basis."

However, but a part of the increase in price of genuine over substitute foods is a real increase. The purchase of attenuated or diluted foods is a false economy, as one pays a fancy price for the cheap dilutant, even though it be harmless water or starch and for a larger size container, where as a smaller package would have held all the active, valuable material. Of course, foods which are in the slightest degree harmful are not cheap at any price. Fortunately, these foods are few, as there are few willful poisoners engaged in business in this country, first, because the business does not fit in with present day civilization; second, because it will not prosper. The most common instances of food poisoning generally arise through ignorance and unfortunately cannot be reached under our pure food laws. While I do not deny that the enforcement of food laws increases the cost of living, I do believe, first, that such increase is generally justifiable, and, second, that a concession in price secured through misrepresentation is far less acceptable to the purchaser than to pay an exorbitant price for the genuine article.

However, the first state food laws were passed in 1879, and in 1906, almost every state had passed and enforced state food laws. Minnesota had a particularly drastic state food law, and from 1893 to 1897 I can personally vouch for many articles of adulterated and misbranded foods, among others filled cheese, being totally banished from the state. Illinois also had a fairly good food law, fairly well and economically enforced from 1899 to 1896. Yet the cost of living had not materially increased in any of these states under the administration of pure food laws. The big jump in food prices occurred between 1904 and 1907. This period covers the agitation, enactment and enforcement of the national food and drugs act of June 30, 1906. I need not quote statistics except to say that the increase varied from 20 per cent in the case of meat to 100 per cent on canned

goods and on all foodstuffs averaged over 30 per cent increase. The national food law differed from state laws, first, in being less definite in its provisions; second, in the law-making and enforcing power being given to, or assumed by one individual; third, in its peculiar penalties and unique methods of enforcement; fourth, in its shifting responsibility from the retailer to the manufacturer. Through the virtues and faults of this act, and through the unfortunate weakness and strength on the part of the chemist on whom its enforcement, without previous experience, was placed, much of the increase in the cost of living is due.

Notice, first, that the increase in living affected foods first and other materials only because the cost of living, mainly food, as clothing had not as yet advanced in price, has increased; second, the first and greatest increase in the cost of food is coincident with the passage of the national food and drugs act. Some of the specific causes for the increase in cost of food under this act are plain.

The national food and drugs act as interpreted has resulted in the sale of all kinds of goods formerly sold largely in bulk, now being sold in packages, and usually in small sizes. It has resulted in foods, even sugar, starch and oatmeal being largely sold under trade mark names and extensively and expensively advertised. It has compelled the destruction of millions of labels every year, because a label legal one year would be illegal the following year. It has concentrated the manufacture of food into the hands of a comparatively few large concerns, each of which must employ a food lawyer and food chemist. It has encouraged, yes, created, trade associations and the elimination of cut-throat competition. It has particularly shut out the sale of substitutes and cheap foods to the advantage of higher priced foods, on which because of limited competition and limited supply almost any price may be demanded. The muckraking chemists and the muckraking magazines have so frightened the consumer that he is not willing to purchase bulk goods or cheap goods and has a feeling of uncertainty as to the purity of even the highest priced commodities protected by city, state and national laws. It has so standardized the production of certain varieties of manufactured goods, as, for example, vanilla and lemon extracts, as to unify the cost of production and to greatly facilitate arrangement of prices and profits.

As previously indicated, I attribute the unjustifiable increase in the high cost of living over the justifiable increase caused by the food law to the Government's censorship of foods exercised by Dr. Harvey W. Wiley beyond the authority conferred by the national food and drugs act. I will state further, as this is a part of the political discussion as to the relative merits of the various party platforms, that President Theodore Roosevelt recognized the source of the extra burden being placed upon the consumer when he appointed, or caused to be appointed, the Board of Food and Drug Inspection, thus partially counteracting the harm Dr. Wiley was doing; also further by appointing the Referee Board of Consulting Scientific Experts to decide on the unknown questions arising under the food act, some of which has been decided without experiment by Dr. Wiley. President Taft also tardily recognized the source of the increased cost of living by dismissing him from the service.

Professor Wilson, while he may in some ways sympathize with Dr. Wiley in return for his apostasy, should he be elected to the highest office in the gift of his countrymen, and clothed with responsibility for the happiness of one hundred millions of people, will doubtless benefit by the somewhat sad experience of his two predecessors.

A VALUABLE AND DELICIOUS FRUIT.

That the alhuacate (Persia gratissima, often incorrectly called the avocado or alligator pear) is the most valuable fruit grown, is the statement of many botanists and horticulturists. As sold in large cities at present, its price almost justifies this description in a way never intended, for half of one fruit is quoted on the menus of fashionable hotels and restaurants at from fifty cents to one dollar. But it is now being planted by the hundred acres in the only two states where it will grow, Florida and California, and within ten years it should be available to every one in the country at not more than ten cents per fruit.

Survey of the Food and Drug World

Patent Medicine Regulation in England.

A select committee of the House of Commons on patent medicines has been holding sessions in London. The purpose of the committee is to make a thorough investigation in reference to the law with regard to the sale and advertisement of patent medicines in the United Kingdom, and to make suggestions and recommendations—if they deem it advisable to do so—with regard to changes that should be made.

In the course of the inquiry it was shown that three years ago even no fewer than 41,757,535 patent-medicine stamps were sold in the United Kingdom. This was practically equivalent to one package of patent medicine for every man, woman and child in the country. It was estimated by one of the witnesses before the committee that the amount of money spent on proprietary medicines in Great Britain in the year 1908 was £2,500,000 (\$12,166,250), which represented a sum sufficient to maintain 40,000 hospital or sanatorium beds.

Some time ago the British Medical Association suggested that when medicines are supplied otherwise than upon a medical, dental, or veterinary prescription the name and quantities of each of the constituents of such medicine should be plainly printed on each package sold, so that such label should constitute a guaranty of the contents of the package, and any false description, whether on the label or in any advertisement, should constitute an offense, and that the food and drugs act should apply to proprietary medicines.

Coffee Is Also Adulterated in Germany.

Adulteration of coffee in Germany was the subject of a circular order issued some time ago by the Prussian Minister of the Interior. The circular, which is to warn the public, in part says:

Roasted seeds of grain, which in form resemble the coffee bean, are often mixed with roasted unground coffee. Other adulterations exist in the traffic of ground or pulverized coffee. There are many complaints concerning adulterations in surrogates of coffee, or blended coffee, which are advertised and introduced under fantastical names apt to deceive the public as to the ingredients. Upon inspection some of these blended coffees were found to contain as much as 30 per cent admixtures, composed chiefly of chicory, acorns, rye, beets, figs and maize. Other samples contained an additional admixture of colored stones amounting to as much as 10 per cent.

Although the admixture of seeds is in general not injurious to health, yet it is to be noted that the lupine seeds contain alkaloids and may, under certain circumstances, cause injury. Therefore the authorities supervising the trade in foodstuffs, especially the official bureaus for investigation of articles of consumption, are charged to devote increased attention to coffee adulterations.

Condensed and Evaporated Milk in Australia.

The Australian Department of Trade and Customs has issued the following order, relative to the marking of condensed and evaporated milk, under the commerce (trade descriptions) act, 1905:

"It has come under notice that certain brands of condensed and concentrated milk, when diluted in accordance with the maker's directions on the label, produce milk under the standard prescribed in the commerce regulations, being deficient in fatty and other solids.

"It is considered that in such cases the directions as to the dilution are misleading and constitute a false trade description under the commerce act.

"Samples are to be tested from consignments, whether imported or brought for export, and any lines found to give results under the standard mentioned are to be detained, and report, together with the sample, is to be furnished to this office."

Use of Ozone for Purifying Water.

Ozone works for the sterilization of drinking water have been erected in the following European cities: Wiesbaden, Paderhorn, Hermannstadt and Chemnitz in Germany; Paris, Nice, Chartres and Dinard in France; Florence in Italy, and St. Petersburg in Russia. Eminent authorities agree that the plants in those cities are working satisfactorily.

The process of ozonization effects a complete destruction of all bacteria of typhoid, cholera and dysentery that may be contained in the water. At the same time it is claimed that the number of so-called innocuous bacteria in the water is considerably diminished.

The ozonization process may also be used on a small scale where sterilized or chemically pure water is desired. Portable apparatus is made in Berlin that can be used for the sterilization of drinking water intended for soldiers while in the field. Machines are also constructed for the ozonization of water in ice plants, in breweries, on board ship, or for any other purpose for which a limited amount of pure water may be demanded.

Manipulation of "Java" Coffee.

In response to an inquiry from the Department of Agriculture at Washington, Consul Frank W. Mahin, at Amsterdam, has investigated the reports that an impure Java coffee is being exported from Amsterdam to the United States. It is stated that owing to keen competition a secret practice of "manipulating" Java coffee has grown up, such coffee being exported largely to South Africa and some to the United States. The process is merely selecting good-sized Santos beans, putting them through a little machine, and polishing and painting them, to give them the color and appearance of the real Java. This is known in the trade as "manipulated Java," which may be wholly or partly made up of inferior kinds. For shipments to the United States it is inferred that the article consists of a mixture of real Java with inferior beans. Outside the trade the coffee is known as Java.

In view of the practice which has prevailed, the consul has decided hereafter to request shippers of Java coffee to add the following declaration to their invoices: "That the coffee covered by this invoice is pure Java, neither mixed with other kinds nor counterfeited."

Parcel-Post Containers for Butter and Eggs.

The parcels post service of Germany is used to a very large extent by farmers in their dealings with city customers, and especially for delivery of butter and eggs. Butter thus shipped is wrapped first in parchment paper and then packed in a cardboard box. As a rule, shipments under ten pounds are not made, each pound being separately wrapped, the total shipment including nine pounds of butter, net. These pasteboard butter boxes come with an upper and lower part and are folded together and fastened with metal clamps to make the finished box. The boxes can be saved and used over again. Eggs are shipped either in strong cardboard or wooden boxes, the inside of which contains corrugated cardboard partitions forming squares large enough to receive one egg. Between each layer of cardboard partitions a sheet of cardboard is placed. The wooden boxes are rather attractively finished and cost at retail 95 cents each. They are provided with a padlock and neat cover, and can be used for an indefinite period.

French Regulations for Canned Foods.

The recently adopted French regulations in regard to foods canned in metal receptacles provide as follows: If brass or copper, zinc or galvanized iron be used for receptacles, these metals must not be in direct contact with the beverage or food, unless the contents be of a solid nature, such as cocoa. Metal containing more than 10 per cent of lead or 1/10,000th of arsenic, or solder containing over 5 per cent of lead or 1/10,000th of arsenic must not be brought into contact with articles of food. The use of boxes with varnish containing poisonous metals, and the employment of wall paper containing arsenic and of written or printed paper, are likewise forbidden, if contact with the contents is possible. Finally, a long list of authorized coloring matters is given. For instance, caramel may be used for beer and spirits, cochineal and vegetable matters (with the exception of gamboge and Aconitum Napellus) for most liquids and solids, and a list of twenty-one coal-tar products which will be tolerated for the coloring of liquors, preserved fruits and sweets, eggs and cheese rind and sausage skins, closes the document. Copper sulphate in the proportion of 100 mg. of copper per kilogramme may be used for coloring canned vegetables.

May Grow Rice in California.

A report on the results of experiments made in rice growing in the Sacramento Valley, California, has been issued by the Department of Agriculture, which says:

"The results from a two-year test of 300 varieties of rice on black adobe soil near Biggs, California, indicate the possibility of rice culture in the Sacramento Valley. The successful introduction of this crop is dependent upon an abundant supply of water, which must always be available during the growing season.

"The soil area adapted to rice in this valley is sufficiently large to produce many times the 55,000,000 pounds of cleaned rice which are consumed each year on the Pacific Coast.

"How much of this area has sufficient available water for proper irrigation is uncertain, though for a good portion of it there is apparently an abundant supply. Increase in the rice acreage should therefore be made with care."

Drug Adulteration Is Old.

There has just been placed on exhibition in the Greco-Roman gallery of the British Museum a small letter which dates back to the first century A. D., and which throws light upon the medical profession of that period.

The letter is written upon a sheet of papyrus about the size of a half sheet of ordinary note paper. The writer was a certain Procleius, a resident of Alexandria, the recipient being a drug merchant named Pecysis at Oxyrhynchus in the Fayum. The missive reads as follows:

"Procleius to his dearest Pecysis, greeting:

"Be so good as to sell at your risk good quality of these drugs which my friend Sotas says that he has need of, so that he may bring them to Alexandria. For if you do otherwise and give him stale stuff, which will not pass muster in Alexandria, understand that you will have to settle with me in regard to the expenses."

The letter was folded and sealed with a clay seal and was indorsed to Pecysis. It is conjectured that he was one of those Greek merchants who employed native Egyptians to gather supplies for them and prepare extracts and decoctions which they supplied to the doctors of Alexandria and other great cities.

Acetanilid Not a Habit-Forming Drug.

The repeatedly published statements that headache cures containing acetanilid are habit-forming has induced a number of druggists to write to *N. A. R. D. Notes*, an organ of the drug trade in Chicago, their experiences with such powders. A. T. Fried of Council Bluffs, Iowa, is one of these, and he says:

"My opinion, based on the observation of several of my customers who have been buying headache powders, some of them for several years, is that neither acetanilid nor acetphenetidin are habit-forming drugs.

"We know either one will relieve an ordinary headache almost instantly, or at any rate in a very short time; but, as the cause of the headache has not been removed, the headache will 'come back' and naturally another of those 'dandy headache powders' will be taken, and they will continue to be taken so long as the headache recurs.

"In my experience of several years, however, I haven't known of one instance where there has been a desire for the drug in the absence of a headache."

The New York "Candy Show."

The International Candy, Baking and Ice Cream Exhibit, which will open at Madison Square Garden, New York, on Monday, November 4th, will have among its attractions the processes of making bread, cake, pastry, crackers, ice cream, soda water and other "soft drinks." There will also be the raw materials and machinery and the finished products of the processes mentioned.

The exhibit is the undertaking of the Master Bakers' Association of New York State and the National Confectioners' and Ice Cream Dealers' Association. The chairman of the Exhibition Committee, Charles Geisert, says that the object is to show the public, long exercised over the pure food question, what are the modern methods of making the articles already enumerated. The purity of materials and cleanliness observed in the making will be the subject of special exposition.

Olive and Wine Crop Prospects in France.

There is every indication of a large olive crop this year in the Provence and Languedoc regions of France, particularly in the Var and Gard Departments. The outlook is less promising, however, in Corsica. It may be stated in this connection

that an important oil mill (*Huileries de Bologne*) was recently erected at Ile-Rousse, between Ajaccio and Bastia. This is the first modern plant of the kind established in the island, and it is expected to contribute materially to the extension of the Corsican oil trade. According to a recent statement of the Federation of Wine Growers, the wine crop in southern France will be at least equal to that of last year, in spite of the reduced production in the Aude and Eastern Pyrenees. A larger yield than during the last two years is probable in nearly all the other wine-growing sections of the country.

An Average Tea Production in Formosa.

The tea season is half over in Formosa, and contrary to the predictions made prior to May 1, the total production of Formosa oolong tea will be one and a half to two and a half million pounds less than last year. But the crop will be about an average, with an export to America of seventeen or eighteen million pounds. The total export to America will depend much upon the quantity used by the Powchong packers out of the autumn crop. The higher grades of tea this year have commanded prices corresponding to the market of last season, but the lower grades are inferior and scarce, and the price has not fluctuated from the high market value of the first of the season. The price for Government standard teas has remained stationary, at \$15 per picul (133 pounds). A noticeable shortage is in grades ranging from "fine" to "choicest." What the autumn crop will be no two exporters are able to agree.

Baking Powder from Maple Sugar.

It is proposed by two Massachusetts chemists to substitute maple sugar sand—a waste product in the production of maple syrup and hitherto thrown away as valueless—for cream of tartar in baking powder. This sand contains, it appears, about 50 per cent of malic acid in the form of calcium salt. According to reports the experimenters have succeeded in making from maple sugar sand a baking powder "equal to those of the highest grade now on the market." It has the following composition: Calcium bimalate, 52 parts; sodium bicarbonate, 25 parts; starch, 18 parts. Regarding the available supply of this sand, a maple grove of 1,000 trees yielded an annual product varying from 16 to 30 lbs. It is said that chemically pure malic acid obtained from other sources than maple sand is about sixteen times as expensive as tartaric acid.

Cold Storage on the Increase in New York.

Tabulations made public October 3 by the State Commissioner of Health of New York show that the amount of produce in cold storage warehouses throughout the state has increased materially during the past year. The report shows that the amount of butter in storage September 1, 1912, was over 4,000,000 pounds in excess of the amount stored on the same date in 1911, and that the number of eggs in storage this year has increased over 120,000 cases. The total number of eggs in cold storage on September 1, according to the report, was 328,450,320. On this date there were stored 15,345,670 pounds of butter, 3,339,556 pounds of poultry, and 3,533,804 pounds of fresh and 1,635,317 pounds of salt meats.

An Animal Poison Squad.

More than 150 cattle, horses, sheep, hogs and chickens on the government experimental farm at Bethesda, Maryland, have been formed into a "poison squad" by experts of the Department of Agriculture, in order to determine whether "bleached" oats and "heated" corn are injurious, and thus determine a bitter controversy between the government and the grain growers. The controversy over whether "bleached" or sulphured oats are injurious to animals promises to reach the proportions gained by the fight over "bleached" flour. Forty sheep, forty hogs, forty chickens, about twenty horses and a number of cattle will be so fed, and their condition closely watched.

Banana Produces Cheap Alcohol.

Banana flour, which is so rapidly coming into use for various food preparations, has been found by C. Nagel, a German, to give promising results as a source of cheap alcohol and a good quality of yeast.

The flour, made by grinding the peeled and dried unripe fruit, is mixed with water and a little malt extract, and at a temperature of 140 degrees to 160 degrees Fahrenheit the diastase of the bananas soon changes the starch into sugar, which is then converted into alcohol by the fermentation following the addition of a suitable yeast.

The Washington Point of View

By Our Staff Correspondent.

Washington, D. C., October 10, 1912.

Assuming because the Republicans are hopelessly divided that the election of Woodrow Wilson is a foregone conclusion, the food and drug world has a right to inquire how much of a figure Dr. Wiley will be in the next administration. Before answering that question it is well to recall a thing or two. The first is that the doctor is now an employe of William Randolph Hearst and that he quit the government service presumably because Hearst and a lecture bureau offered him more money than the government could afford to pay him. He quit saving weak women and defenseless children because there was more money in writing pieces for Hearst and speaking other pieces from the platform. He left the business of salvation to anybody President Taft and Secretary Wilson might select.

The second thing to remember is that William Randolph Hearst supported James Beauchamp Clark of Missouri, commonly called the last syllable of his second given name, for the nomination that Thomas Woodrow Wilson received. As an incident in the fight he made for Clark he denounced Wilson in as round terms as any Republican ever pronounced against the speaker. Still another interesting, but not important thing to be remembered, is that Dr. Wiley was a candidate for the Democratic nomination for the vice-presidency. Only the doctor and a few of his friends knew that fact, even if the doctor, in various speeches and lectures, has said that each of the three leading parties offered him second place on the ticket. He did not make that insinuation in the presence of managing politicians and newspaper correspondents who attended the convention, the doctor being a wise man and also disliking hoarse and ribald laughter such as would have greeted that assertion if made in the presence of the aforementioned politicians and correspondents.

In the light of the facts hereinbefore set forth, how much of a figure will he cut in the Wilson administration? It is regarded as a certainty that Albert S. Burleson of Texas will be Secretary of Agriculture and it will be up to the Texan to appoint a chief of the Bureau of Chemistry. He is a friend of Wiley but really, as a practical man, he has had more use for Wilson and McCabe, the men who made the food and drugs act a workable thing instead of the farce Wiley would have made it with his fantastical idea that it gave him the right to set aside the law officers of the government and leave the construction of a statute to him and then subvert the Anglo-Saxon system of legal procedure by requiring the man accused by him to prove his innocence.

Burleson had as much to do with the nomination of Wilson as any one man. But he had the help, and the very efficient help of Robert Broussard of Louisiana, the one man in public life who is sure of eight years of official life without having to undergo the pain of fatigue of an election. The Louisiana man, who serves in the House until next March on the certificate granted him in 1910, and then serves two more years in that body on a certificate that will be issued to him next month and then begins a six year term as senator, made a successful fight for Wilson in his state, saving the nominal Wilson leader in that state from the operation of the unit rule, which would have given Clark the twenty votes from the state on all ballots. Without the constant accretions of strength from Louisiana Wilson could not have been nominated.

Broussard and sugar are synonymous terms. His district is the heart of the sugar country. It was in the sugar house of Edward J. Gray, Broussard's nearest political friend, that Dr. Wiley made his experiments in clarifying syrup without the use of sulphur; that is to say in Gay's sugar house he did the work that he called clarification without sulphur, but inasmuch as the syrup was all returned to Gay as unmarketable, the experiment cannot be said to have been successful.

Does anybody suppose that Broussard would allow Burleson to name somebody who would be under the domination of Wiley? He will have hard enough time to keep sugar from being put on the free list without assenting to an appointment that would so seriously cripple the chief industry of his constituents.

But Wiley may be given the right to name the chief of the Bureau of Chemistry, provided he names the right man. That proviso is the important thing. Now it is coming to

be the thought here that Dr. Bigelow would be as good a man as Wiley could choose. If the doctor would agree to choose Bigelow, the chances are that he would be allowed to name his own successor. That may provoke a smile or two, but Woodrow Wilson, by reason of Wiley's foolish contribution to the Democratic campaign hand book, has already been informed by an overwhelming majority of the food and drug trade that the Democrats in it cannot stand for the idiocy there shown forth. The assertion was made to the writer by a Democratic attorney who represents food and drug manufacturers opposed to Wiley that Wilson has had the Democratic committee instruct the spell-binders to ignore Wiley's part of the campaign book because those manufacturers, many of whom are Democrats, unless Wiley's part of the book is ignored, will turn in and work for Taft. In other words, if Wilson chooses to take Wiley's part in the controversy, they will vote for a continuance of the administration that properly kept Wiley from putting into effect his Quixotic notions as to what the food and drugs act means, assuming of course that Dr. Wiley was honest in his opinion that the law means what he has been saying. Of course that is a hardy assumption in view of the course the doctor took with regard to the products of several manufacturers.

Dr. Doolittle will probably be sent back to New York in a short time. Bringing him to Washington was one of the patent errors of Wiley. He is not up to the mark in any way and his interview with President Taft just before the latter went to Beverly settled his chances of promotion. The scientific work under him is even more ridiculous than under Wiley. Taking it up, either at the instance of Wiley or because he knew it would please Wiley, Doolittle tackled glucose with a view to showing that it is a deleterious thing. The report made on it is said to have been so full of ludicrous errors, discovered by other scientists in the department, that appointment of Doolittle became out of the question, whether the errors were due to ignorance or hurry to bring out a condemnatory report making no difference as to the conclusion to be drawn.

Woodrow Wilson, as president, will not be able to forget the things he learned as Woodrow Wilson the college president. One of the things he will know without any one telling him is that the men composing the Remsen board, are monumentally superior to the chemists in the Department of Agriculture and that not one of them could have been induced to make experiments with benzoate merely as an incident to a trade war and that therefore their report on it is entitled to absolute credence because if they had considered it ethical to participate in a trade war, each could probably have made a good deal more money working for the scrapping manufacturers than he received from the government.

Dr. Bigelow, during the whole fight, never lied. He never denied receiving letters in the Rusby matter. He fought for Wiley as hard as he knew how without lying for him. Of course inasmuch as Wiley resigned as soon as more money was in sight, thereby leaving Bigelow exposed to the hostility Secretary Wilson and Solicitor McCabe naturally felt against the insubordinate Wiley? Bigelow can hardly be expected to be a slavish follower of Wiley after this. Therefore Bigelow would probably make a good man for the next administration to place at the head of the bureau. He is not responsible for the present disorganized condition of the bureau. In fact he is deserving of credit in that it is not worse. Those who know say that Bigelow has been the administrative officer of the bureau and that without his help Wiley would have either had to devote more attention to the bureau, thereby cutting down his production of platitudes that caught the fancy of unthinking people, or have allowed it to become a greater joke than it is now under the temporary guidance of Doolittle, who "has come" from New York and who will probably "have went" back to New York before the question of Wiley's successor is settled.

A "MADE IN MINNEAPOLIS" MENU.

The hotels and cafes of Minneapolis will serve nothing but "Minneapolis-made" food during "Made in Minneapolis" week, which will begin October 28th. To devise a menu from foodstuffs produced in a city will tax the ingenuity of any chef. We suggest that the most popular dish will be wheat cakes and maple syrup.

The Law and the Food Manufacturer

A Beer Trade-Mark Case.

Judge Robb, of the Court of Appeals of the District of Columbia, has refused to reverse the examiner who held that "Amber" registered for beer, properly prevented the registration of "Amber Bead" for near-beer. The court said:

"By this appeal the Independent Breweries Company seeks a reversal of the Commissioner of Patents refusing registration of the words 'Amber Bead' as a trade-mark for a beverage composed in part from malt and containing less than one-half of one per cent alcohol.

"The ground of the Commissioner's action was prior registration by the George Weidmann Brewing Company of the word 'Amber' as a trade-mark for beer. That the two marks are deceptively similar is plain.

"But, it is insisted, the marks are not applied to goods of the same descriptive properties. This contention must fail. The general and essential characteristics of the goods to which the two marks are applied are the same, and this is sufficient. In *Walter Baker & Company vs. Harrison*, 32 App. D. C., 272, the first of those cases, it was ruled that coffee and cocoa are goods of the same descriptive properties within the meaning of the trade-mark statute, and in *Phoenix Paint & Varnish Company vs. Lewis*, 32 App. D. C., 285, that paste paints and ready-mixed paints are of the same descriptive properties. In the present case the only real difference between the goods of the two parties is that there is less alcohol in one than in the other.

"For the reasons set forth in the two cases to which we have referred, the decision of the Commissioner is affirmed."

Massachusetts Cold Storage Rules.

The Massachusetts State Board of Health has communicated with the local boards of health throughout the state, calling their attention to the new cold storage law enacted at the last session of the legislature, and which went into effect on the first of September.

Under the new law the merchants who sell cold storage products must put up a sign, "Cold storage goods sold here," and the letters of the sign must be in type not less than two inches in height and be posted in a conspicuous place.

The board has made a ruling that articles held for less than thirty days in low temperature for temporary protection, are not regarded as cold storage. Such articles, however, must be kept separate from general storage articles.

The State Board of Health requires in enforcing the cold storage law that articles of food offered for cold storage should be packed in containers, and that such containers should be stamped. Cold storage articles, such as eggs, not packed in containers, must be marked. The marking of packages includes name of storage firm and place of keeping, the words "cold storage," and date showing the receipt into cold storage and its removal therefrom.

Cold storage warehouse operators are compelled to notify owners of food stored fifteen days before the twelve-month limit expires. Extension requests to the board must be made at least two weeks before the expiration of the twelve-month limit and on blank forms furnished for the purpose. The board will grant such requests only after it has made an inspection of the goods.

Several sanitary rules include cleanliness of walls and receptacles, prohibit employment in cold storage warehousing of any person afflicted with infectious or any contagious disease, and place a ban on the storing of decomposed and putrified articles unfit for food.

Will Test Validity of Local Ice Cream Standard Ordinance.

G. W. Shortess and the Davenport Ice Cream Company will appeal the cases against them in Moline, Illinois, for violating the city ordinances relating to the standards of ice cream. The Moline ordinance establishes a standard of fourteen per cent. The defendants claim this is in conflict with the state law, which fixes eight per cent as the standard. The ice cream in question tested twelve per cent butter fat. Fines of \$10 and costs against each were imposed, when they defaulted. This is the second case brought by the Moline authorities against the manufacturers. The com-

panies claim to be fully complying with the law, and say their product is of high quality. They mean to fight the Moline cases in the higher courts, and are satisfied they will win.

Treasury Ruling on Tartaric Acid.

A notice has been issued to collectors of customs by the Treasury Department saying that the Department of Agriculture has held that refined tartaric acid and cream of tartar containing lead in excess of twenty milligrams per kilogram shall be held as adulterated. When the analysis shows the contents to be in this proportion, it is said, the product contains "an added poisonous and deleterious ingredient which may render the product injurious to health." The collectors of customs are warned to act accordingly and watch all imports of tartaric acid and cream of tartar that may be adulterated.

Michigan Oleo Law Invalid.

The Michigan Supreme Court, in a decision by Judge Stuart at Grand Rapids, has declared the recently enacted state oleomargarine law unconstitutional, because it unlawfully restricts the rights of dealers to advertise an authorized and legitimate article of food. The first section of the law requires that in selling oleomargarine its ingredients must be plainly printed upon the package and clearly explained to the purchaser. Section 4, on the other hand, prohibits the use of the words "creamery," "butter" or "cream" in advertising the oleomargarine. In the case at issue the dealers advertised that their oleo contained fifty per cent of cream or creamery butter.

First Insanitary Cream Can Case Won in Iowa.

The State Food and Dairy Commission of Iowa has just won a victory in a case which is of note because it is the first of its kind in the state. Information was filed against a Carroll (Iowa) farmer on the charge of selling cream from a can that was in an insanitary condition. The farmer was found guilty and paid a fine of \$25. Heretofore cases have only been filed when the contents have been found unclean, but now all cases where the receptacle is found in an insanitary condition will be prosecuted. The information was filed by State Inspector L. L. Flickinger.

Views of the Press

Food Preservation.

It does not disparage the great services Dr. Wiley has rendered to the country to say that some of his conclusions may be open to considerable doubt. While the "board of three" in the Department of Agriculture has not seemed to work very well, and after considerable hesitation the appellate health authorities have by a majority vote acceded to his opinions of saccharin, there are serious objections to leaving the whole question of what preservatives may be used to a single enthusiast, either Dr. Wiley or his successor. Some comprehensive treatment of this matter by a congress of chemists and physicians is highly desirable, and meantime a reasonable and conservative administration of the law.

At the hygiene congress some speakers have again defied the conclusions of Dr. Wiley on the latest chemical over which he made a fight, holding that benzoate of soda is a perfectly wholesome food preservative. Is it necessary—is it safe—to prescribe the use of a preservative regarding which competent authorities are not agreed? Dr. Wiley's first experiments were made with borax. He made his tests under conditions most calculated to appeal to the imaginations of the "poison squad," for the borax was administered in capsules instead of mixed with the food, and used in considerable larger quantities than it would be in food. This he recognized, but he held that if it were injurious in large quantities it must be proportionately so in small quantities. This conclusion is not absolutely certain. Excessively salted food will cause scurvy, but small quantities of salt are necessary for health. This borax question was thoroughly debated in Eng-

land and Germany; in the former the scientists could not agree, and in the latter one of the most eminent scientists in the world declared that he took a dose of borax every day, and on his birthday took a double dose.

Saccharin has finally been excluded, but it was over a saccharin that President Roosevelt first lost confidence in the pure food expert. It happened that Mr. Roosevelt had been using it for years. Of course when used medicinally it is used in very small quantities, but when used for seasoning food it would also be used sparingly. Even in the case of copper (now definitely discredited by the Remsen Board), which must not be used for greening articles of food, there is medical authority—not to refer to our grandmothers who made pickles in copper kettles—for the harmlessness of the chemical in quantities larger than would be used in food preservation.

There is no doubt that highly injurious chemicals were formerly used in food, and Dr. Wiley has rendered a great public service. At the same time some caution is required in following specialists. Nobody would urge the use of borax or benzoate of soda or saccharin, but when benzoate of soda is permitted a hearing before a congress of hygienists, it is evident that there are two sides to the matter, and the subject of preservatives in food demands a more comprehensive investigation than has been given to it here. If modern science with all its achievements has been able to add no harmless preservative to the salt, vinegar and alcohol known for centuries, it is a very singular thing. It is worth notice that the new preservatives have been denounced on the ground that if they retard putrefaction they must retard digestion. If that be true—which it probably is not—it is just as true of salt as of anything else. But when all has been said, it remains true that the known harmless preservatives are preferred by the consumer to those whose nature is a subject of dispute. He should be safeguarded as far as possible against imposition, and to that end should invariably be notified on the label of his goods what constituents have been employed in preparing them.—*New York Journal of Commerce.*

The Tax On Oleomargarine.

The contest between the manufacturers of dairy butter and oleomargarine goes on with unabating interest, each side striving for Congressional recognition which will enable it to put up a stronger front against its adversary. The dairy interests have been specially active in persuading Congress to keep a tax of 10 cents a pound on colored oleomargarine to weaken the competition with their cheap grades of butter.

Really, it is difficult to see why Congress should have taken any action in this contest other than to see that whatever products are offered for sale by either the dairymen or the oleomargarine manufacturers shall be in conformity with the National pure food law, leaving the disputants and the consumers to settle whatever points of controversy may be involved. It would seem that the law of supply and demand should be sufficient to meet all requirements. Some persons prefer butter at any cost, while others, less able, perhaps, to afford the prices demanded for butter, insist on the privilege of being permitted to buy oleomargarine at a price within their ability to pay. To place a tax on the latter article which would bring the cost of production to a point equal to the cost of good dairy butter would be an injustice to many persons who cannot afford to pay the prices which this would make necessary, as well as to the manufacturers of oleomargarine.

Since cotton seed oil enters largely into the composition of oleomargarine, Southern people naturally are anxious that there shall be no laws which discriminate against this Southern product, while with the greater part of the dairies in the North the people of that section want to see them encouraged, so the fight is to an extent sectional in its character, but with no especial feeling manifested on either side except by those who are directly interested in the two industries. But it must be clear to all unprejudiced minds that if a clean, pure, wholesome vegetable product can be supplied at a less cost than the fancy brands, or even the cheap grades of dairy butter, the consumers should have a right to use oleomargarine if they desire to do so, without any restriction by Congress, and the mere fact that to make the article more attractive to the eye and thereby more pleasing to the taste, a harmless coloring substance is used, should afford no pretext for imposing a high tax on the article, the only effect of which is to give an additional advantage to the dairy interests.

All that the law may properly require is that oleomargarine shall be properly branded and sold for what it is, without

any deception, and if people who cannot afford the higher-priced dairy product prefer oleo to the cheap grades or worked-over butter, there should be no obstacle in the way of their getting it, provided the product conforms to the requirements of the pure food law.—*San Antonio Express.*

Inspected Grain Under the Pure Food Law.

That millers frequently have just grounds of complaint on account of the character of wheat delivered to them on contract, this journal does not for a moment question. Nor has it ever excused or justified the manipulation and sophistication of grain in "hospitals" and mixing houses. At the same time it cannot but believe that the construction of the pure food law as applied to grain in the Hall-Baker case, was altogether too sweeping. And consequently this journal believes that whatever may be the merits of the original case, which was decided against the Hall-Baker Grain Company in the lower court, the United States Circuit Court of Appeals did wisely in refusing to apply a technical literal construction of the pure food law to a business like the grain trade.

The case at issue involved the charge of misbranding and adulterating 5,000 bushels of wheat which were sold to a party in Texas. The contract called for No. 2 red and the wheat was inspected out of the elevator as such. A government inspector in Texas held that the shipment was mixed, which apparently was true. But as the wheat was sold under the Missouri inspection the Court of Appeals held that there was no intentional violation of the law. The court further said:

"The act of Congress was enacted to catch and punish merchants who are conducting their business by customary and approved methods with no intent to deceive purchasers, or to injure the public health, for the mistakes of third persons over whom they have no control, nor for trivial errors of their own, which at first blush may seem to bring their action within the inhibition of the law, but by which in reality they violate neither its letter nor its spirit. There was no evidence to sustain any of the charges in this indictment. The case is reversed and remanded to the court below for a new trial."

We repeat that whatever may have been the merits of this particular case, it would produce chaos in the grain trade if the seller of grain could be held liable for acts not his own, for the mistakes of official grain inspectors, for instance. Indeed, a strict application of the pure food law to the grain trade would be tantamount to abrogating grades altogether. Any seller of grain could be prosecuted for "adulteration," for where can one find grain absolutely uniform and absolutely free from foreign admixtures? Yet any deviation from an impossible standard of purity would be a technical violation of the pure food law.—*American Miller.*

A Bill of Fare Study.

Beets, according to New York market quotations for a certain day in July, could be bought for \$1.50 per barrel. On the same day an order of beets in any first-class restaurant or hotel in New York would have cost thirty cents at least.

Of course no man would want a barrel of beets at one sitting; besides, there are many men who are not placed in a position to grow and cook their own beets, and the result is that they must pay others to provide them with beets. But at the rate of \$1.50 a barrel, how long would thirty cents' worth of beets last the average person? Thirty cents would buy one-fifth of a barrel of beets at the quoted price. Not many men will consume that quantity of beets in ten years; and yet these same men in one beet season will, at popular restaurant prices, pay out ten times as much as they would have to pay for a fifth of a barrel of beets, which is but another way of saying that what they pay for ten orders of beets would buy them two barrels of beets.

The fact is worth pondering. We will hear much of the cost of living during the present campaign. What is true of beets is true of other things daily consumed by the people of this country. The same proportionate difference between the crop market price and what the ultimate consumer pays will be found to exist in the cases of most articles of common use and consumption.

What becomes of this apparently large difference between the wholesale and the retail price of things? In wages and profits it is parceled out among a large number of persons engaged in useful and necessary industrial and business activities, and in the final analysis the allowance of each is none too large. If we should arbitrarily retail beets at

wholesale prices, what would happen? A clear loss which would force many men out of employment; and that is true of nearly everything we wear and consume.—*Seattle Post-Intelligencer*.

Good Work of the Canning Laboratory.

A most practical and interesting work is being done at the United States Government laboratory in San Francisco, where Dr. A. W. Bitting, Food Technologist of the Bureau of Chemistry, is conducting experiments in the canning and processing of fruits. The building at 615 Sansome street has been fitted up with all the apparatus necessary for commercial canning on a smaller scale than in the big factories, but with capacity for a greater range of varieties than is to be found in most of them. The laboratory is equipped for canning fruits, making jellies, jams and catsups, condensing milk, preparing baked beans, and in fact for doing almost anything in the canning line, and is furnished with retorts, large and small, sterilizers, exhausters, preserve kettles, machines for capping the sanitary cans, machines for washing cans and bottles, a machine for exhausting and capping jelly glasses, a vacuum pump, a registering thermometer and other necessary apparatus.

All of the work is conducted with the exactness of experimentation in pure chemistry, and complete records are kept of the various processes. Commercial canners are making use of the laboratory to find out how some of the results which they obtain are arrived at, as it is impossible to trace from results back to causes with the same exactitude in large commercial plants as at the laboratory where every step of the work is noted and recorded by scientific observers. Causes of spoilage, agencies and methods which affect the flavor and consistency of the product, and many other important points are made the subject of graded experiments. Many cases of preserves and jellies testify to the amount of work that has already been done at the laboratory.—*California Fruit Grower*.

Kraut Is Not an Epicurean Dish.

Now, kraut, whether of native or foreign origin, is not a dish highly prized by epicures. Not many epicures have gone crazy over kraut. It is seldom offered at fashionable hotels. Yet kraut is a large factor in the diet of many families. Some households consume two barrels each year.

"Pig's knuckle mit kraut" is regarded as a great feast by some, and it is not spurned by men of discretion and good digestion. On a cold winter's day, when all the world seems cheerless and forlorn, a piping dish of "pig's knuckle mit kraut" has brought solace to many a weary mortal in his troubled journey through this vale of tears.

Whether made at home or abroad, kraut contains only two ingredients, cabbage and salt. There is no mystery in its preparation, no secret, nor written formula guarded with jealous pride and handed down from father to son. Nothing like that. The process, from beginning to end, is simple, easy and economical.

First sprinkle a little salt in a stout barrel that has been thoroughly cleaned and scalded. Then slice your cabbages, throwing aside the tough centers. Drop the sliced cabbage into the barrel and pack it down hard with a heavy stomper, fashioned like a large potato-masher. Put in a layer of about four inches of cabbage at a time, and sprinkle salt on each layer.

When the barrel is full a layer of brine, or salt water, will be found covering the top. This will pickle the cabbage, convert it into kraut and prevent it from spoiling. Now put a board on top, weight the board down, and in ten days you will have that rare delicacy so highly prized by many of our most estimable citizens of foreign birth.—*Davenport Democrat*.

Pie Eating Defended.

Again is pie-eating defended, this time in the *New York Medical Journal*.

"In its proper place," says the *Medical Journal*, "pie is not only a palatable but a nutritious staple, an excellent vehicle of carbohydrates and fruit. It is not essentially indigestible, and demands only proper mastication and insalvation to insure lack of discomfort."

In other words, if we chew pie as persistently as we chew the rag about the indigestibility of pie, we shall find it as sweetly digestible as it is blandly delectable.

"Pie crust," this authority goes on to say, "is only flour and lard, the latter being replaced usually by chicken fat by those who object to any form of pork. Delicacy of manipulation is required in the making of the crust, and such deli-

cacy depends paradoxically upon great digital strength, for only the strong have a genuine lightness of touch.

Thus is explained the armor-plate crusts so often the product of the deft but weak "manipulation" of slender, pretty and youthful brides as compared with the flaky, sea-foamy kind turned loose by older and stiffer-fingered mothers. But wait a moment; we can eat and even live in comfort upon our sweet girl graduates' pie after all, for the paper continues: "A soggy paste, however, made by frail fingers, is only aesthetically objectionable, for resolute chewing will deprive it of its terrors."

Now, however, comes the crux of the pie matter. We customarily "top off" with pie and cheese after we've had a hearty dinner and enough; but if we eat lightly and then have pie, or make pie and cheese answer for a whole meal there is not the slightest ill effect from it.—*New York World*.

The Vanishing Lobster.

The high price of the lobster is explained by the fact that the demand for the "king of the crustaceans" is increasing while the supply is diminishing; and under present laws and commercial practices there is little probability of a lower market rate for this popular sea food. Indeed, there is reason for a prediction that within a few years the lobster cannot be had except at a prohibitive price. So eminent an authority on lobster culture as Dr. George W. Field, chairman of the Massachusetts Fish and Game Commission, believes that the lobster is doomed to extinction unless there are radical changes in the laws and a disposition on the part of the public to co-operate in the work of remedying the mistakes of the past thirty-eight years. Dr. Field is one of the most prominent of the biologists of New England, and years of experience in the culture of shellfish give weight to his opinion as to the future of the lobster industry. He is not an alarmist; he speaks as a scientist who has first-hand information, and for this reason his views should command attention if the public is interested in the preservation of the lobster.—*Providence Journal*.

Cutting the Cost of Food.

The city of Philadelphia commissioned Professor Clyde King of the University of Pennsylvania to make an inquiry into the high cost of Philadelphia living. Professor King and his aids took a number of standard articles of food and traced them from the soil to the table. They followed these articles every step of the way, noted every addition to the price, who got it and why. Then they made the following recommendations:

1. The development of a trolley freight system from farm to city, with trolley terminals in various sections of the city.
2. The development of municipal markets.

The Philadelphia board of aldermen is now about to carry these plans into effect.

A city of New York commission discovered that the people of the East Side were buying decayed apples while good apples lay on the ground less than a hundred miles away because the growers couldn't make proper shipping arrangements. Plans are under way to stop this waste of apples and of health.

Des Moines has established municipal markets, which have reduced the cost to the consumer 50 per cent and increased the price to the farmer 50 per cent.

Baltimore to date has spent \$2,500,000 on its municipal markets; the receipts have been \$3,200,000, and the householder has got his produce lower than ever before.

A similar investigation in Chicago might show that this city, too, is suffering from archaic methods of distribution and wasteful multiplicity of middlemen.—*Chicago Tribune*.

The Eleven-Cent Steer Is Here.

As predicted in the columns of the *National Provisioner* last week, the 11-cent beef steer has arrived. He landed in Chicago on Wednesday, when a bunch of sixteen steers were bought by Armour & Co. for 11 cents per pound on the hoof.

And what was even more remarkable was the fact that the steers were not natives, but branded cattle from the West. Last week's high mark of 10.90 cents was reached the day before on a bunch of Iowa-fed branded Herefords, but the following day the 11-cent price was paid for cattle even less high grade.

Another striking evidence of the market situation was the sale on Thursday of a bunch of North Dakota grass steers, which had never tasted a grain of corn, for 9.75 cents alive. This price was even higher than the top a year ago for the best corn-fed natives.—*American Provisioner*.

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CHANGE IN SUBSCRIPTION PRICE EFFECTIVE JANUARY, 1913

From January 1, 1913, the subscription price of THE AMERICAN FOOD JOURNAL will be \$2.00 a year in the United States, \$2.50 in Canada, and \$2.50 in other countries in the Postal Union.

Subscription orders at the present price will be accepted, when accompanied by cash or check, up to December 30, 1912, for not more than one year.

Present subscribers can renew their subscriptions for one year at the present price, provided the renewal order reaches us before December 20, 1912.

After January 1, 1913, all subscriptions and renewals will be billed at the new price.

THE CASE OF CASSIDY.

Mr. Harry P. Cassidy, who established a monthly magazine to advertise the fact that he was the only genuine bona fide, dyed-in-the-wool food inspector in Philadelphia, has been dismissed by his superior officer, and the dismissal has been confirmed by Gov. Tener of Pennsylvania. Mr. Cassidy was charged in various affidavits and complaints with having done a lot of things that he should not. It was alleged among other things that he conspired with an attorney who occupied joint offices with him to involve food dealers in prosecutions so that the attorney might gain fees. The evidence on this charge, while merely circumstantial, was of a character to convince Gov. Tener that something was rotten in the fact that the special agent of the Dairy and Food Commission occupied the same office as the attorney who appeared for the majority of the defendants prosecuted under the food law. Mr. Cassidy contends that he found these quarters because he was deprived of quarters that he had originally taken, by Commissioner Foust, and that he moved in with the attorney to save money. Another charge, and the one that seems to have the greatest weight with Gov. Tener, was that Mr. Cassidy's acts had been insubordinate. In his letter confirming the dismissal of Mr. Cassidy, Gov. Tener points out that all the confidence between the special agent and his superior offi-

cers had been destroyed and his removal was therefore for the good of the service.

Special Agent Cassidy has had a great deal of publicity. He has been press-agented beyond his deserts. He was a newspaper reporter who had become a sort of half policeman through his work about police stations. His chief characteristic seems to have been the possession of inordinate nerve. His appointment was forced on Dr. B. H. Warren, Commissioner of Agriculture of Pennsylvania under a former administration, by E. A. Van Valkenburgh, editor of the Philadelphia *North American*. Cassidy knew nothing about food work when he was appointed. He could be relied upon, however, to put through anything that he was required to put through, and as he was extremely active and energetic he managed to fill the columns of the Philadelphia newspapers with what the city editors call "live wire" stuff. He was frequently interviewed and made frequent voluntary statements. He always posed as the protector of children and weak women, whose lives were being menaced by food "poisoners" and "dopesters." These three words—"protector," "poisoner" and "dopester"—were a large percentage of his vocabulary.

Cassidy always attributed to himself extraordinary devotion to his duties and always denounced any food manufacturer or dealer whom he had occasion to prosecute in the most extreme terms. To a dispassionate observer, his conduct was of a character that left great doubts of his sincerity. The constant harping upon his devotion to duty, his frequent declaration that he was the protector of women and children, and his rather violent denunciation of accused food men, had a tendency to create a poor impression of his sincerity and to induce the belief that Cassidy would not last long as special agent of the Food and Dairy Department of Pennsylvania, unless he had some powerful backing. This indeed he had, in the person of Mr. Van Valkenburgh, who was ever ready to give Mr. Cassidy publicity and defend his acts, however extreme. Some political conditions in Pennsylvania, however, have enabled a rising tide of discontent with Cassidy in various quarters to compass his dismissal. The local political machine of Pennsylvania, the one that holds the reins of power and appoints men to office, is of the regular Republican stripe. The Philadelphia *North American*, and presumably its protegee, Cassidy, are very closely affiliated with the Bull Moose or Progressive party. The steam roller, properly manned, has been applied to Mr. Cassidy, who, despite that he has been curtailed in his activity by being deprived of quarters and office paraphernalia, must have carried momentous possibilities. To review or examine all of the ramifications of political exigencies and the underground wires of politics that are so numerous and complicated and far-reaching in such a state as Pennsylvania, to connect all of these various influences with Cassidy, would require a considerable volume. It is a safe guess, however, that Cassidy rarely made a move that did not have some political significance, and, in spite of his present eclipse, he may be looked upon as likely to bob up again in some connection or in some office where he may serve those interests, hidden or open, that he has undoubtedly served as special agent in the Food and Dairy Commission in Philadelphia.

Mr. Cassidy is a man of versatility. This is shown by the fact that he could take up the work of an office that he had never filled before, and the duties of which

he was utterly unfamiliar with, and convince the public that he was delivering the goods. He has been very successful in keeping in the limelight and has figured as the hero of several magazine tales.

The magazine called *The Forecast* was established in Philadelphia in his interest, and his name and portrait have appeared on the title page of practically every issue up to the present time. At least two articles in each number were devoted to Cassidy, and then, so that the printer might be paid and other expenses met, a large number of food dealers, such as ice cream, butter and eggs, candy, mineral spring water, olive oil and other dealers and manufacturers, took spaces running from one-quarter of a page to a page to help the good work along. Even the men who had been prosecuted by Cassidy paid the regular advertising rate and took space so that *The Forecast* might continue its good work of advertising Cassidy. There is no greater nobility of character than that displayed by a man who has been arrested and punished on a criminal charge, who then deliberately subscribes to advertising space of small value, in order that the man who prosecuted him might publish an organ devoted to advertising his own greatness and worth. Far be it from us to suggest that these advertisers were hopeful of escaping future prosecution because of their contributions. Mr. Cassidy himself would undoubtedly admit that no such base motives actuated the advertisers in his personal organ.

About two years ago, Mr. Cassidy discovered that certain candies were being made in Pennsylvania that contained glucose that had been bleached with sulphites. The columns of the Philadelphia *North American* were filled day after day with the story of the progress of these prosecutions that Special Agent Cassidy brought against the dealers when he made the discovery. Not very long afterwards, a magazine writer, named Cleveland Moffett, made this fight on sulphites the basis of a very laudatory article in *Hampton's Magazine*, since defunct, praising Cassidy's work. Mr. Moffett made a slight error in accepting the statement of Mr. Cassidy that the Standard Oil Company had paid the fines of a number of candy dealers, and he and his magazine were formally sued for libel by the Standard Oil Company. A retraction was printed and the entire statement as it affected the Standard Oil Company was denied. It is noteworthy that the only sufferers by this untruth were Mr. Moffett and *Hampton's Magazine*, who got their information from Cassidy and the Philadelphia *North American*. This goes to show that Cassidy is something of a genius. His taste for publicity has perhaps abated for the time being. It is noticeable that a man always gets weary of newspaper publicity when it becomes condemnatory rather than laudatory.

A FRIEND OF THE SUGAR TRUST.

The AMERICAN FOOD JOURNAL again questions the accuracy of the judgment of its Washington correspondent, but nevertheless prints his views in full because we look upon him as an able and conscientious writer. He may be guilty at times of making a wrong deduction, but he is rarely at fault with his facts.

Our correspondent this month, as will be seen by referring to his letter, concludes that Dr. Wiley is opposed to the interests of the sugar planters of the South, and suggests that Mr. Brossard, who is likely to have something to say regarding the appointments in the Department of Agriculture, in the event of the

success of the Wilson and Marshall ticket, will oppose Dr. Wiley and his views when the appointment of chief chemist of the Department of Agriculture comes up because, in the purview of our correspondent, Dr. Wiley's attitude toward the sugar growers has hitherto had the appearance of unfriendliness. As a matter of fact, there is much in Dr. Wiley's career to convince one to the contrary. As late as this Spring he was on the stand in the Congressional investigation of the so-called sugar trust and urged very strongly that the tariff on sugar be retained in the interest of the commercial progress of the sugar industry.

It is a fact recognized by numerous canners and compounders of food products in which a sweetening element is desired, that saccharin is just as useful as sugar. Where it is not intended or desired that a food element be added with the sweetening element, and that the sweet flavor be added much as any other flavor would be, saccharin is a preferable agent, equal to sugar as a sweetener but not as a food. Its use for such purpose should not be restricted. The volume of saccharin combined with foods and used as a sweetener will automatically limit itself to a point below any possibility of injury to the human system. If a quantity be added sufficiently large to result in damage to digestion the substance to which it is added will be so sweet as to be nauseating. This is, in other terms, the report of the Referee Board. Naturally, the use of saccharin would obviate the necessity of using sugar in many foods, and in view of its vastly lower price, would certainly curtail the market for sugar with many food manufacturers. To prevent or restrict the use of saccharin would result in advantage to the sugar trust. It is noteworthy that Dr. Wiley adopted the sugar trust's viewpoint of antagonism to saccharin whether he intended to be friendly to the sugar trust or not. These two instances of Dr. Wiley's activity in behalf of the sugar trust, whether he was impelled by altruistic motives or otherwise, ought to convince the sugar growers of the South that any influence he may have upon the powers that will appoint his successor will not be exercised against their interests. Dr. Wiley is unquestionably a useful servant to the sugar trust, whether he deliberately intends to be so or not.

THE DELETERIOUS PRESERVATIVE.

The Illinois food law prescribes that certain things shall not be used or sold as preservatives in foods. Under this law it is probably entirely possible for a householder to go to a drug store and purchase formaldehyde or boric acid for use in his own home as a preservative, but the Municipal Court of Chicago recently decided in a prosecution filed by the Illinois Food Commission against a Chicago firm making a commercial preservative containing the forbidden ingredients for public sale, that such sale was prohibited by the act. This decision would seem to restrict the right of action of an individual who might be desirous of purchasing the compounded preservative for his own use, and to the extent that it curtails personal rights it should fall under criticism, but there is another consideration to be observed, and that is the necessity of protecting the general public against the promiscuous sale and use of deleterious ingredients in foods where there is a great possibility of such ingredients being introduced into the food of unsuspecting persons. As an example, Mrs. Patrick Delany, a widow of Spring Valley, purchased a preservative that the dealer assured her would keep milk from

souring, but neglected to inform her that it was forbidden by the state law to be used in milk that was to be sold. Mrs. Delany sold the milk to her neighbors, and as a consequence had to face two charges covering the sale of milk and cream.

Dr. W. P. Cutler, Food Commissioner of Missouri, who has been fighting for months past to get a pure and wholesome milk supply for the city of St. Louis, recently found thirty samples of milk containing added formaldehyde. There is no question that the preservative was added innocently in some of these cases, and the fact of its having been so added is unquestionably due to the promiscuous sale of preservatives, such as the Illinois law under the decision referred to prohibits.

Until all of the people become so well informed that these mistakes will not be made, it is absolutely necessary that legal safeguards of a drastic character be employed to prevent them. One would suppose that the use of formaldehyde in milk, a practice so universally condemned and inhibited legally everywhere, would have been stamped out by this time, but here are thirty cases in one bailiwick, most of them doubtless due to a deliberate intent to evade the law, but a certain proportion of them unquestionably due to ignorance.

NATURE'S LAWS AND THE STATUTES.

Fruits and vegetables have a tendency to continue the life processes after having been separated from the parent tree, or bush, or vine, as the case may be, if the separation occurs before maturity. The process is a natural one. Oranges will ripen if cut when green and placed where the ripening process will be unretarded. So will tomatoes. So also will sweet potatoes. Everybody knows this, and so some little surprise was felt when last year the Bureau of Chemistry announced that the practice of "artificially" ripening citrus fruits by storing them in heated cars during shipment would be prosecuted. But the surprise felt at this proposal was insignificant compared to that expressed when Florida passed her citrus fruit law last year, which provided that no green or immature fruit should be shipped out of the state, the basis of the law being the proposition that fruit not ripened on the tree was not "naturally" ripened. The moving influence back of the passage of this law was the Florida Fruit Exchange, an organization of growers covering the entire state.

The first arrest this year under the law was that of a shipper who sent a carload of grape fruit to D. E. Evans & Company, a Chicago commission firm. The basis of this arrest is peculiar. Last year it was found difficult to enforce the law for several reasons. The only arrests made under it were upon informations sworn to by officers of the Florida Fruit Exchange. After its passage, the exchange began a campaign to get it enforced. It was put up to the Agricultural Commission and Commissioner McRae declared the law was a general law enforceable through the regular state authorities. The Attorney General declared it was an agricultural law, to be enforced by the Commissioner of Agriculture. Nobody wanted to touch it, and the officials of the Fruit Exchange began to swell up with indignation. Here they had been to all the trouble to get the law passed and it wasn't doing them any good or putting any outsiders out of business.

In July or August of this year Commissioner of Agriculture McRae and State Chemist Rose met the

Florida Fruit Exchange in joint convention and a "standard" of ripeness in citrus fruits was established. This provides that oranges may not be shipped unless the proportion of sugar to acid is seven to one, and grapefruit must not be shipped before October 1st. Of course these "standards" are not legal, but they constitute a sufficient basis for action, and the one prosecution noted has been the result. The AMERICAN FOOD JOURNAL ventures the prediction that the Florida citrus fruit law will not remain on the statute books very many years.

THE AYES HAVE IT.

In order to settle the more or less vexed question of how Oklahoma voted on the adoption of a resolution endorsing Dr. H. W. Wiley at the Seattle convention of the American Association of Dairy, Food and Drug Officials, letters were dispatched on September 27th last by the editor of the AMERICAN FOOD JOURNAL to the two participants in the convention from Oklahoma, asking for their version of the affair. Their replies are as follows:

Norman, Okla., Sept. 30, 1912.

The AMERICAN FOOD JOURNAL, 15 South Market Street, Chicago, Ill.

Dear Sirs.—In reply to your letter of the 27th would state that U. S. Russell did the voting in this case. He contended, at the election, that he had two votes and I had one to cast at all times of voting, so I put it up to him to do the voting after the vote on Executive Committee was over. My best recollection of the matter is that he voted "yes." The stenographer's record should settle that, however.

EDWIN DEBARR.

Oklahoma City, October 2nd, 1912.

The AMERICAN FOOD JOURNAL, 15 South Market Street, Chicago, Ill.

Dear Sirs.—Replying to yours of September 27th, relative to the vote of this state at the Seattle meeting of the Dairy, Food and Drug Officials on the Wallis motion to eliminate from the resolutions the endorsement of Dr. Wiley, I will say that your journal is in error in that it gives the three votes of Oklahoma in favor of the Wallis motion, when, in fact, the three votes of this state were cast against the Wallis motion. I note that you asked if I voted independently on this question. You are advised that I cast the votes for the three members from Oklahoma, two of whom were present in person; one being represented by proxy, with instructions to cast it in support of any resolution endorsing the position or administration of Dr. Wiley.

I cannot account for the error in the minutes which show Oklahoma to be voting otherwise. I sincerely trust that you will make proper correction in the journal.

U. S. RUSSELL,

Assistant Food and Drug Commissioner.

The records of the stenographer show that the three votes from Oklahoma were cast affirmatively on the Wallis motion, which was in these terms: "Mr. President, I move that the statement just read in regard to Dr. Wiley be eliminated from the resolutions." If Mr. Russell got confused after the motion was restated by the chair and voted "yes" under the impression that thereby he was voting for Dr. Wiley, it would seem that the onus of the error should rest with him. Men sometimes get confused and commit errors of far-reaching effect under the stress of excitement artificially stimulated, and here may be an explanation of Mr. Russell's unfortunate *faux pas*.

Neither the letter of Mr. DeBarr nor that of Mr. Russell clears up the mystery satisfactorily. Apparently the record of the reporter of the meeting will have to stand as the best evidence of what took place.

SOLVING AN EGG PROBLEM.

The celebrated Keith egg case, decided in the United States District Court in New Jersey upon its first trial in favor of the claimants, a case of wide interest in food circles because of the attitude the court took upon the question of bacteriological count as evidence of putrefaction or decomposition changes in eggs, is about to be heard upon appeal by the United States Supreme Court. Upon its decision will hinge the fate of the chemical and bacteriological standards in the Bureau of Chemistry, touching eggs and other substances of an animal or vegetable character subject to fermentive and putrefactive action as a result of the presence of bacteria. This particular case and others of a similar character that have been brought point to an obvious need for the application of inventive genius to a method at once cheap and effective to destroy the inherent bacterial life in animal and vegetable substances either before its inception or at some stage before the substance attacked or the natural host of the bacterial life becomes unfit for food. Of interest in this connection are the experiments of a scientific gentleman whose work has been described in various recent newspaper articles, who has partially succeeded in ridding the egg of bacterial life by a process of sterilizing the hen. The sterilizing media are urotropin and benzioc, salicylic and boric compounds of sodium, the urotropin having produced the best results. This seems to a useful field for scientists, provided the hens are not injured by the various sterilizing compounds. This method will appeal to the scientific world as being at least interesting and fraught with far-reaching consequences, even if it is not vastly successful or does not come into general use. If this is found practical and capable of general application by poultry men, a long step toward the solution of the problem of bad eggs will be made. If it can be brought to the highest point of development, the process will mean the absolute elimination of bad eggs and the production of eggs that can be kept fresh without refrigerating or pickling methods for a long period, and such cases as the one now before the United States Supreme Court will not occur.

THAT VOTE AT SEATTLE.

The frequent publication of the circumstances surrounding the rejection of the resolution to endorse Dr. Wiley at the Seattle convention of the American Association of Dairy, Food and Drug Officials last July, by newspapers and magazines working in the interest of Dr. Wiley, impels us to suspect that that gentleman's friends find something to his credit in the fact that of the three delegates from the Department of Agriculture, two voted against the resolution and one refused to vote for it. To our mind there is more of discredit to Dr. Wiley in this episode than any sneers or charges of conspiracy can ever overcome. The gentlemen who voted against him were his intimate associates for years in the Department of Agriculture. The one who refused to vote for him had been his subordinate in the Bureau of Chemistry. They were in a position accurately to gauge the man and know whether he was a fit subject for even a perfunctory vote of confidence. No harm would have been done by a vote of confidence in Dr. Wiley and no good, either. But the three men in all the convention who knew him best refused to vote for him and two voted against him. Only upon the hypothesis that

these men were mental incompetents can anything of credit to Dr. Wiley be deduced from the vote at Seattle.

ANOTHER CONSPIRATOR.

The Springfield *Republican*, published in Springfield, Massachusetts, not Springfield, Illinois, nor Springfield, Missouri, nor even Springfield, Ohio, has apparently joined the conspiracy against Dr. Wiley. In the course of an editorial in which it defends former President Roosevelt against Dr. Wiley's charges that he tried to block the passage of the pure food law, the *Republican* says:

The pure food law has brought forward for official determination for the first time in this country various questions of chemistry relating to foodstuffs upon which neither Colonel Roosevelt nor any other layman was qualified to pass. Dr. Wiley, whose zeal and vigor, while useful, were not such as to create in all minds implicit confidence in his professional accuracy, took one position in regard to a variety of substances then entering into prepared foodstuffs, such particularly as benzoate of soda, and other chemists differed from him.

In the acute controversy thus precipitated, which involved, first of all, the public health, and in the second place large interests, the appointment by the president of a Referee Board of five chemists of the recognized highest standing, men at the head of their profession, was certainly, in theory at least, a reasonable course to pursue.

If this be not treason, if this be not conspiracy, we fail to classify it. Nothing will serve to protect the *Republican* from a charge of having joined the conspiracy against Wiley.

COMMITTEE ON CO-OPERATION MEETS.

A meeting of the Committee on Coöperation of the American Association of Dairy, Food and Drug Officials was held in Washington in the rooms of the Board of Food and Drug Inspection on September 30th. All the members of the committee, Dr. S. J. Crumbine, secretary of the State Board of Health of Kansas; A. H. Jones, State Food Commissioner of Illinois, and M. E. Jaffa, director of the State University Laboratory at Berkeley, California, were present.

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HERMAN B. MEYERS.

Sworn to and subscribed before me this 28th day of September, 1912.

JAMES A. SAGE.

(My commission expires Jan. 28, 1916.)

Household Science and the Table

CHEESE: HOW IT IS MADE AND ITS VALUE AS A FOOD.

By Elenora Elizabeth Reber.

Cheese, we are told, is the oldest of dairy products, and the first form in which milk was preserved for future use as a human food. In many countries of Europe we find cheese as a principal article of regular daily diet, and the people are strong, healthy and frequently leaders in athletic exercises and sports in competition with meat fed people. In this country, however, except in certain sections which are settled principally with immigrants from cheese-consuming and cheese-producing countries, and their descendants, we have been slow to adopt cheese largely as a primary article of food, and have kept it more in the class of condiments or appetizers. Perhaps all of my readers are acquainted with the old couplet—

"Apple pie without the cheese
Is like a kiss without the squeeze."

and there are thousands of people whose cheese consumption is chiefly confined to an occasional very small piece with apple pie or some other food, or perhaps a sprinkling as a flavor to certain kinds of dishes.

According to the statistics, the average per capita consumption of commercial cheese varieties in the United States amounts to in the neighborhood of four pounds. On the other hand, the per capita consumption of meat in the United States is variously given as between 169 and 185 pounds. When it is taken into consideration that cheese is a food of the meat class, and when it is extensively eaten, the meat ration should be proportionately decreased, we can understand with what comparatively little favor Americans hold cheese as an important food.

It is also interesting to note that we have not learned how to use cheese in a very wide variety of cooked dishes, and while in other countries it is extensively utilized with other foods, largely vegetables, by far the larger proportion of cheese in this country is eaten without any preparation.

In fact, there are several varieties of foreign manufactured cheese which are made in large quantities and exclusively for use in connection with other foods or flavors in cooking. Among these may be mentioned the familiar Parmesan, a hard cheese made from skimmed milk; and also sap sago, a small conical shaped cheese made from skimmed milk and highly seasoned with herbs.

Originally cheese making was a home industry carried on principally on individual farms; now, however, the larger amount of this article produced in the United States for commercial purposes is manufactured in modernly equipped factories, and millions of dollars are represented in the industry, while several hundreds of millions of pounds are produced annually. Add to this the millions of pounds im-

ported and it will be seen that we are steadily growing to have a better conception of the value of cheese in the diet, and in time when there has been disseminated adequate information among the housewives of the country as to the great value of this important food, we may easily become an extensive cheese-consuming country.

The consideration of cheese diet from the standpoint of economy is also worthy of attention, and the statement is authoritatively made by food experts that "practically the only food product that rivals cheese in food value and cheapness is dried beans." In one of the bulletins of the United States Department of Agriculture which discusses the value of cheese from a food standpoint we find this paragraph:

"A comparison of the food value of cheese with that of other highly nitrogenous food materials may be of interesting value. No kind of meat excepting dried beef contains such a large percentage of protein as cheese, and as dried beef contains a much greater percentage of water, the other food constituents aside from protein are much less than is found in cheese. Fresh beef as purchased has, weight for

weight, little more than half the food value of cheese, in either protein or fat, and the same is practically true of all other fresh meats, which have in many cases such a large percentage of water that they are noticeably inferior to cheese in food value. Bacon and fat pork are exceptions, but their food value is mostly in fat, which can be and is replaced to a great extent by the carbohydrates of vegetables at a much less cost and sometimes at a benefit to the health of the consumer. Fish and pork each have a notably large percentage of refuse, while eggs have a high percentage of water. To sum the matter up, a pound of cheese has nearly the same food value as two pounds of fresh beef or any other fresh meat as food; it is worth as much as or more than a pound of ham and is more digestible, and it is equal

to two pounds of eggs or three pounds of fish. In price good cheese made from unskimmed milk costs about a third more than round steak and twice as much as the cheaper boiling beef, while it costs practically the same per pound as smoked ham and bacon. It costs usually a third more than fresh fish." The "high cost of living" is probably the most popular theme for discussion that could be suggested. Housekeepers are accordingly interested not in generalities but exact figures showing the money value of different varieties of foods, and the following is given as from an authoritative source:

Food Material—	Price.	Ten Cents Will Buy Ounces.	Ten Cents' Worth Will Contain Protein Ounces.	Fuel Value Calories.
Cheese	22c per lb.	7.3	1.09	886
Beef, average	20c per lb.	8.0	1.2	467
Porterhouse steak	25c per lb.	6.4	1.3	444
Dried beef	25c per lb.	6.4	.1	315
Eggs	24c per doz.	10.0	1.3	198
Milk	9c per qt.	38.3	1.2	736
Wheat bread	5c per lb.	32.0	2.9	2,400
Potatoes	60c per bu.	160.0	...	2,950
Apples	1½c per lb.	106.7	...	1,270



"THE DAY ON WHICH THE BIG CHEESE WAS MADE WAS A GALA DAY AT APPLETON . . . AND THIRTY-FIVE EXPERT, WHITE-UNIFORMED CHEESEMAKERS WERE REQUIRED TO HANDLE IT."

As to the conditions under which cheese is manufactured in factories, and the resultant purity of the product, it is a fact that the agitation concerning cleanly and sanitary practices and surroundings in all places where food products are made and handled has extended to all kinds of dairy products, in creameries, cheese factories, etc., and there is rigid and frequent inspection to insure the careful and cleanly handling of milk from farmer to consumer, whether it be in the form of milk, butter or cheese, while infractions of the law are prosecuted by the officials upon complaint of inspectors.

Briefly, the process of cheese making as commonly practiced in this country may be described as follows:

The milk, after being cooled by the dairyman or farmer, is hauled to the factory in covered cans, and is deposited in immense vats, in which it is heated as a commencement of the process. Usually only fresh, unskimmed milk is used. After being heated to about 85 degrees, the rennet is introduced, and the casein, which constitutes more than three-fourths of the proteids of the milk, is precipitated and in about twenty minutes the "curd" is formed, most of the fat attaching itself to this curd. The curd is then broken up by means of a grinding machine, after which the mass is heated to a temperature of about 100 degrees.

When the curd tests the required amount of acid the whey is drained off, and the curd is then washed and salted, and is made ready for the press, being placed in "hoops" and subjected to sufficient pressure to form the contents into cheese of the desired size and weight.

From the presses the cheese is taken and set away in the ripening rooms, the time required for ripening varying according to the character of the cheese being manufactured, sometimes several months being required to develop the flavor.

In ripening the cheese changes in texture and its original pastiness gives way to a somewhat granular consistency in some types, or to a waxy or buttery appearance in others. There are of course many variations of practices in factories to produce the different varieties of cheese with respect to the kind of milk used, the proportion of butter fat or cream retained in or added to the milk, and with respect to methods followed in separating, preparing, seasoning and handling the curd, as well as handling and ripening.

The American factory cheese—the so-called American cream cheese—is of the English Cheddar type, and is the

France, Holland and Italy. The largest quantities are received from Switzerland and Italy. The first named country sends us the Emmental variety; from Italy we get Parmesan and Gorgonzola, while Roquefort, Camembert and Brie varieties come from France and Holland contributes the Edam.

There is almost an infinitude of shapes and sizes of cheese from the small tin foil varieties to the immense round cheese weighing hundreds of pounds. Indeed, at the last exhibition of the National Dairy Show Association in Chi-



Courtesy of Ninneman & Santee, Random Lake, Wis.
CHEESE IN CURING ROOM READY FOR BOXING.
View in factory of Brost & Winkler, Plymouth, Wis.

cago in 1911, there was on view what was called the "World's Biggest Cheese," which weighed 12,000 pounds, and required a flat car to transport it from Appleton, Wis., where it was manufactured, to the Show in Chicago. The day on which the big cheese was made was a gala day at Appleton. It was stated that it required the milk from 10,000 cows to make this mammoth cheese, the night and morning milkings being used. Six vats, each of 700 gallons' capacity, were required to hold the curd, and 35 expert white uniformed cheese makers were required to handle it, their assistants numbering twenty-five men. And this immense cheese was not made merely for exhibition, but was sold to one of the large department stores of Chicago, who took it from the Show case to the firm's grocery department, and from there sold it out to the housewives of Chicago.

Again referring to work of investigation done by the nutrition experts of the United States Department of Agriculture, we find some very practical hints in reference to the economical use of cheese in the home, some of the results of their experiments being summarized in the following paragraphs.

Cheese combined with cereal foods makes a rational dish, we are told, as regards the proportion of nutrients supplied. Cheese and some of the crisp "ready to serve" cereal breakfast foods form a combination that is common, the cheese being either melted with the cereal or simply served on the side with it. These dishes may properly be eaten without cream or sugar. Since such a combination contains considerably more protein than breakfast cereals as ordinarily served, it has the advantage in that it may well serve as the principal item of a breakfast menu, instead of preliminary to other courses.

A large variety of cheese rolls may be made by combining legumes, either beans of various kinds, cowpeas, lentils or peas, with cheese of preferred kinds and adding bread-crumbs to make the mixture, making it thick enough to form into a roll. Beans are usually mashed, but peas and small Limas may be combined whole with bread crumbs and grated cheese, and enough of the liquor in which the vegetables have been cooked may be added to get the right consistency. Or, instead of beans or peas, chopped spinach or head lettuce may be used. Home-made cottage cheese, and the soft cream cheese of commerce, standard cheese or English dairy may be used.

Epicures have devised a dish which consists of lettuce with French dressing served with cream cheese and thick preparations of currants or other fruits preserved in honey



Courtesy of Ninneman & Santee, Random Lake, Wis.
PUTTING CURD IN HOOPS READY FOR PRESS—LAST OPERATION.

View in factory of Brost & Winkler, Plymouth, Wis.

most commonly used of all the commercial varieties in the United States. The name comes from the English village in which it originated. When made from sweet cow's milk unskimmed the cheese is called "full-cream;" if part of the cream is removed from the milk before it is made into cheese the resultant product is termed "part skim" or "skim," as the case may be.

Most of the imported cheese consumed in the United States comes from the four countries, viz., Switzerland,

or sugar, which, owing to the fact that the seeds have been extracted by a laborious process, are fairly expensive. The soft cheese often found in market also is relatively expensive. There is a suggestion in this dish, however, for others which are much less costly. Buttermilk cream, or ordinary cottage cheese served with lettuce or other green salad and a small amount of rich home-made preserve, is a combination with much the same character and also very appetizing.

When cheese is consumed in considerable quantities it is desirable to buy it in larger amounts, and the fact that it may be kept easily with light refrigeration is a factor in its favor. One of the best ways of keeping cheese which has been cut is to wrap it in a slightly damp cloth, and then in paper, and to keep it in a cool place, says one authority. To dampen the cloth, sprinkle it and then wring it. It should seem hardly damp to the touch. Paraffin paper may be used in place of the cloth. When cheese is put in a covered dish, air should never be wholly excluded, for if this is done it molds more readily.

In some markets it is possible to buy small whole cheeses, and these may be satisfactorily kept by cutting a slice from the top, to serve as a cover, and removing the cheese as needed with a knife, a strong spoon or a cheese scoop. It is possible to buy at the hardware stores knobs which when inserted in the layer cut from the top make it easy to handle. The cheese below the cover should be kept wrapped in cloth.

There are literally hundreds of recipes for serving cheese in all courses from "soup to raisins," as the phrase goes, and at any meal of the day. Another fact to remember in connection with cheese is that it is an article of diet that is "seasonable" every day of the year. We don't have to skip the months without the "Rs," nor wait for the harvest season, nor pay any attention to whether it is hot or cold. Cheese, so far as its continuous supply is concerned, is the most staple of foods and its right to a bigger place in our estimation as a principal food cannot be rightfully disputed.

Interesting Food Notes

WHAT A FAMILY CONSUMES.

In the course of a year the average American family consumes an amount of beef representing the equivalent of a yearling steer and the pork product of an average sized pig, besides smaller quantities of poultry and mutton.

OYSTERS TO BE ELECTROCUTED.

An electrical expert of Rochester, N. Y., as the result of a long series of experiments, believes that he has discovered an infallible method of preventing the danger of typhoid fever being conveyed through oysters. His method consists simply in passing a powerful electric current through the tubs of water in which the oysters are kept. He declares that this destroys all the germs by electrocution.

MINCE PIE AND PICKLES IN THE FIFTEENTH CENTURY.

According to Christine de Pisan, a French woman writer of four hundred years ago, mince pies and pickles were known in Europe at that period. She describes the making of pasties that closely resemble our modern mince pies and the preparation of cucumbers and other vegetables with spices much as they are prepared at present in American kitchens. At that period also perfumes were much in use and hobble skirts were a popular style in woman's dress. Mademoiselle de Pisan's work is a word picture of society of that day—the times of Joan of Arc. That the high cost of living then existed is shown in the case of one young woman who had a dress so heavy with jewels that it required two attendants to carry her sleeves as she walked about.

LOW COST OF LIVING NEARLY FATAL.

George H. Ward, known throughout Connecticut for his feats of pedestrianism and who last summer announced he had cut his expenditures for food down to twenty-six cents a week, was taken from the Hubbard inn to the hospital in Middletown in a serious condition as a result, the physicians say, of his method of living. Careful treatment, however, will bring him back to his former health, as he has a re-

markable constitution. Ward's twenty-six cent diet has consisted of oatmeal crackers, with pancakes for a treat now and then.

PIECE OF RYE BREAD AS A KEEPSAKE.

Mrs. William Backer, of Fulton, Mo., has a collection of keepsakes and heirlooms unusually unique and probably in a class to themselves, as such collections go. Included in the lot is a piece of dark rye bread forty-two years old, a handkerchief fifty-nine years old, a small white shawl sixty-eight years old, a waist fifty-two years old and a German army discharge paper ninety-four years old. The piece of rye bread was given to Mrs. Backer by her sister, Miss Elizabeth Velte, of Germany, as the former embarked for America. The bread gradually dried up until it is about one-eighth of its normal size and is almost as hard as rock.

MEDICAL VIRTUE IN EGGS.

According to a paper read by Dr. Amat before the "Societe Therapeutique," Paris, the membrane covering a newly laid egg forms an excellent fertilizer for human skin. When a patient comes to him with a bad wound he washes it, covers it with tiny layers of egg membrane and bandages it up. In four or five days the wound is healed and a fresh patch of skin has grown. Another Frenchman—a chemist—doses his chickens with quinine and other drugs in frequent demand and sells their eggs at prices ranging from five francs a dozen up. These are sold to people who object to taking their medicine neat, and they are assured by the enterprising chemist that the doctored eggs will do them all the good they require.

NUTRITIVE VALUE OF MUSHROOMS.

Mushrooms are not so nutritious as meat, bread, corn, peas, tomatoes, or any of the ordinary foods. A pound of round steak is nearly five times and a pint of milk nearly twice as nutritious as a pound of mushrooms. They are not as wholesome a summer food as are fresh vegetables and fruit. Where their value comes in is that they can be grown fresh for mid winter use, at which time the human system does not get all the fresh vegetables needed. There is no other vegetable that can be grown in a crowded city in winter and that, therefore, can come on the table but a few hours after coming out of the soil. This gives mushrooms distinctly a health phase. They can be preserved in summer and kept for winter use, but, as a canned vegetable, they are less wholesome than peas, tomatoes, corn, peaches, or pears.

ORIGIN AND CHARACTERISTICS OF RHUBARB.

While rhubarb had been cultivated in this country since 1573, it is only lately that it has been grown as a substitute for fruit, says an English journal. The early cultivation of the plant was altogether for the sake of the root, which was used to prepare the medicinal rhubarb. As regards the date of the introduction of the rhubarb into this country we may note that E. M. Holmes in the "Encyclopaedia Britannica" states that it "was introduced into England through Sir Matthew Lister, physician to Charles I., who gave seed obtained by him in Italy to the botanist Parkinson." The rhubarb of our gardens is a native of Siberia and the basin of the Volga, and its name recalls its Russian origin. The ancient name of the Volga was the Rha, and the name came to be applied to the root of the plant imported from thence. So the Romans called it Rha barbarum, the foreign root. From this come the French rhubarb and the English rhubarb. During its cultivation in this country many new varieties of rhubarb have been raised from seed.

CIDER AS A MEDICINE.

A recent issue of the Bulletin of the French Academy of Medicine contains a report by Dr. Montais that he has clearly demonstrated the value of cider in the treatment of gout. In eight cases the doctor has observed that the acute attacks either ceased entirely or became much less frequent where it was used as an exclusive beverage.

When cider was discontinued an attack occurred very shortly. In several cases in which restriction to mineral waters had produced but slight benefit cider proved efficacious. In conjunction with rational diet and exercise eradication of the dread disease is promised by the author. The cider was of a light variety diluted with one-third of its

volume of water, added immediately after the completion of the fermenting process had been carried to the extent of being "dry." In this form it is easily digested. The much dreaded uric acid, that bane of high livers, is converted into a less harmful product.

NOTHING FREE BUT SALT AND WATER.

Practically all the large hotels of New York have bread and butter off the free list and levied on them a tariff of 10 cents a portion. Free bread and butter, one of the national bulwarks, has gone—gone forever, it is feared. The high cost of foodstuffs is the cause alleged by members of the Hotel Men's Association, who have agreed upon the new bread-and-butter tax.

President Marsh of the corporation that owns the Martini Hotel thus explains the matter:

"The hotel men have been giving away food when they really couldn't afford it. With butter at 50 cents a pound and bread advancing in price, taken in consideration with the robust appetite of the average consumer, it is folly not to place these things on the menu with a reasonable charge attached."

WHAT SOVEREIGNS EAT AND DRINK.

Fifty thousand menu cards have been collected by the Geneva International Association of Hotel Employes and are on exhibition at its headquarters in London. Most of the cards are those used in royal houses of Europe by kings, princes and prime ministers. The German historian of a couple of centuries ago who defended the theory of the rights of a "noble" ruling class by saying that they were really a different physical species from the commoners because of their superior and more delicate diet, would have reveled in the Geneva Association's collection, if it had been in existence at that time. But his theories might have been given a sad jolt by the simple meals eaten by some British sovereigns. For instance, Queen Victoria's favorite breakfast consisted of poached eggs and hashed mutton on toast—at a cost of about thirty-five cents. But King Edward's tastes were more elaborate. He it was who introduced imported Russian caviare into the royal menu.

The dish most frequently appearing on the menu of the German kaiser is salmon cutlet. The czar's favorite meal in the evening is beefsteak and potatoes.

FOOD AND PARCELS POST.

Ever since the passage of the act providing for a parcels post the postal officials have been receiving inquiries from farmers as to the best way of packing eggs and live chickens for mailing. The inquiries have of course a humorous aspect; the officials are said to be worrying how to handle the chickens, rabbits and guinea pigs the farmers are going to mail as soon as the new system is in operation.

Against any seeming absurdity in such expectations may be set the seriousness of the situation in Philadelphia as just reported to Mayor Blankenburg. The people of that city have to pay thirty-five cents a dozen for eggs in the markets, while the farmers just beyond the suburbs get only nineteen cents for them. Equally absurd differences in prices are found in all other kinds of foodstuffs of local production, and are due solely to a lack of easy communication between the household and the farm. If the parcels post puts an end to that defect the dwellers in American cities will have no occasion to ridicule the eagerness of farmers to make use of it as soon as it gets into working order. The joke, if there be any, will not be on the farmer or on the consumer.

A LEGEND OF BREAD AND OWLS.

There is, in Hamlet (Act IV., Scene 5), a speech by Ophelia, in which she says, "They say the owl was a baker's daughter," and these words to the average reader would be more or less unintelligible. In reality they refer to a Gloucestershire legend, a familiarity with which renders the meaning of the passage quite clear. The story is that Christ went into a baker's shop, where baking was going on, and asked for some bread to eat. The baker's wife thereupon took a piece of dough and put it into the oven to bake for him. Her daughter, who was of a mean disposition, reprimanded her mother for her generosity, and insisting that the piece of dough was too large, reduced it to an exceedingly small size indeed. The dough, when put back into the oven, began at once to swell, and became an enormous loaf; whereupon the baker's daughter cried out, "Heugh, heugh, heugh," and this owl-like noise induced Christ to change her into that bird.

PISTACHIO NUTS A POSSIBLE AMERICAN CROP.

The nuts from the pistachio tree (*Pistacia vera*), which is native to the European Levant and Asia Minor, are bright green oleaginous kernels and used to flavor culinary preparations, ices, etc. The United States takes nearly two-thirds of the pistachio nuts grown in Syria. The 1911 crop in Syria was relatively not as plentiful as that of Persia. The exports do not run into high figures on account of the extensive Turkish home consumption for confectionery. Invoices of pistachio nuts to the United States through the various American consulates in Turkey aggregated \$114,849 in 1910 and \$115,745 in 1911. The growing of the pistachio in the United States has been carried on for several years under the encouragement of the Department of Agriculture, although the trees have not yet produced commercial crops. The Bureau of Plant Industry, after experimentation, finds that the most suitable regions for pistachio culture are western Texas, New Mexico, and the interior valley of Southern California, a dry climate being better than a humid one. The demand for pistachio nuts is growing, and the American market will, it is thought, absorb large quantities when they become available.

BREAD FASHIONS IN ENGLAND.

At the Bakers' and Confectioners' Exhibition in London during September there was an interesting display of bread-making machinery, to which an English newspaper alludes as follows:

"One of the competitions open to aspiring bakers is for the best bun, and it has produced enough buns to satisfy a legion of school treats. It is a relief, after passing acres of fancy work, to come upon stacks and pyramids of plain bread. If the cakes are becoming more artistic, bread is certainly becoming more mechanical in its methods of production. There is a huge show of baking machinery—dividers to sift the flour, a great metal arm to knead it, another device to cut the dough into loaves, and finally a wonderful oven. These machines make 200 piping hot loaves out of a sack of flour in two or three hours. There are geographical fashions in the shape of loaves. In London people like the crusty cottage variety. Up in the north they are all for the square-tin shape. The Midlands fancy the Coburg, which is the cottage loaf without its topknot. The south likes its bread drier than the north.

"Fashions are more changeable in sweets, especially in the gelatinous brands, which run readily into topical molds. One of the new inventions is the small transparent Boy Scout."

NAPOLEON AND SUGAR BEETS.

The method of extracting sugar from beets, by which more than half the world's supply of sugar is now produced, was the discovery of a German scientist, but the credit for establishing the culture belongs to Napoleon. In the course of his great struggle with England the emperor of the French issued his famous decrees forbidding commercial relations with that country, and specifically prohibiting importations from British colonial possessions, from which at that time practically the entire supply of sugar was obtained. Cut off from this supply the price of sugar in France rose within a few years to \$1 a pound and threatened a revolt among his own subjects. Napoleon, however, had had eminent French scientists studying the sugar beet and experimenting to determine its possibilities. As a result of their investigations he was able to meet the difficulty by directing that ninety thousand acres of land in various parts of the country should be devoted to the culture of sugar beets. At the same time he called attention to the fact, discovered in the experiments conducted by his experts, that "the growing of the beet root improves the soil, and that the residue of the fabrication furnishes an excellent food for cattle."

In such dramatic and arbitrary fashion did the humble beet make its appearance as a factor destined to assume world-wide and mighty commercial importance. To Napoleon it was only a minor incident in his herculean struggle for dominion, but it stands to-day as the most beneficent single act of his career, for the demonstration that beet culture improves the soil and increases the yield of other crops used in rotation with this one has revolutionized the agricultural methods of the leading countries of continental Europe, has halted the flood of emigration that formerly poured out of these countries, and has solved for all time the threatening problem with which they were confronted, of providing a food supply for their people.

CONSERVATION CONGRESS AND SEGREGATION OF ROOSTERS.

(From a Staff Correspondent.)

Indianapolis, Ind., Oct. 10, 1912.

Charles Lathrop Pack, a millionaire of Cleveland, Ohio, and a pioneer in the movement for conservation of natural resources, was elected president of the National Conservation Congress to succeed J. B. White of Kansas City, at the closing session of the fourth annual meeting of the nation's great "saving" group of thinkers in Indianapolis during the first week of this month. A woman was chosen for the vice-presidency, a place created at this meeting. She was Mrs. Philip N. Moore of St. Louis, for president of the General Federation of Women's Clubs. Thomas R. Shipp of Indianapolis, now a candidate for Congress from the Seventh Indiana District, was re-elected to the executive secretaryship, and James C. Gipe of Washington was named assistant secretary. D. Austin Latshaw of Kansas City was elected treasurer.

The meeting of the congress in Indianapolis, held October 1st to 4th, was attended by approximately 700 delegates from thirty-four states. Primarily the interest of the delegates centered in the conservation of human life and health, but the conservation of other resources came in for a goodly amount of discussion and action.

After almost a week of discussion of hundreds of topics, the resolutions committee of the organization summed up the work by the endorsement of the following: Conservation of vital resources and the health of the people; establishment of a national department of health; accurate registration of births and deaths; measures for preventing births of hereditarily defective children; safeguarding of the health of industrial workers; discouragement of child labor; advanced methods of sewage disposal; uniform legislation regulating the refrigeration of perishable foodstuffs; protection of migratory birds by Federal law; propagation and preservation of food fishes; a general series of state and national land surveys; approving the withdrawal of public lands pending classification; recommending the work of the Federal forest service; protection of forests from fires when necessary by Federal troops; uniform state activity in forest work; moderate forest taxation; uniform laws for the betterment of mining conditions; public control of water power development; improvement of conditions in rural districts in schools; appreciation of the vital resource exhibit held at the Indiana statehouse as an adjunct to the congress, and other matters.

Food subjects were more or less minimized before the congress, but the "vital resources" exhibit at the Hoosier statehouse more than made up for the deficiency. Dr. Winthrop Talbot, in charge of the exhibit, collected displays of all sorts, but the one which attracted more attention than all the others combined was a model house, erected in a corridor of the capitol building, wherein was displayed modern features of culinary and other domestic arts, which have not been paralleled in the middle west since the Chicago exposition.

The model dwelling first of all was provided with a model kitchen and thoroughly modern and up-to-date utensils and appliances of all sorts were in evidence. Girls from the domestic science departments of the Indianapolis high schools cooked "model" biscuits, cakes, pies, potatoes, meats, and more elaborate foods throughout the week. As a tribute to the success of the venture Governor Woodrow Wilson of New Jersey, returning to his hotel from a political speech October 3rd, stopped at the model house and made a hearty lunch from the delicate viands set before him there.

Wilson spoke before the congress, supporting the conservation idea in a more or less general way. Theodore Roosevelt was to have been here, but was unable to appear, his political duties elsewhere being entirely too arduous. President Taft was represented by Secretary of War Stimson. A feature of the congress, which did not materialize because of the failure of eastern experts to appear, was to have been a "milk congress" at which every known phase of the milk problem in cities and rural communities was to have been discussed and exemplified.

Parts of the exhibits which attracted the widest attention were those set up by officials of the state's pure food and drug department and by the state sealer of weights and measures.

The latter exhibit was a Mecca for housewives of Indiana throughout the state in "short weighing" their patrons, and all through the week. The methods of unscrupulous dealers

the short scales, measures and weights they did it with, were shown, and state officials lectured to the women attending the exhibit at each hour of the day on the methods of safeguarding purchasing. That the lectures will result in a much more rigid enforcement of the new weights and measures statute in Indiana is certain.

Canned goods, catsups, pickles, jellies, preserves, vegetables and other types of food often adulterated were made the subjects for elaborate discussion by the lecturers at the exhibit, and the crowds that thronged the capitol throughout the week testified to the unusual interest evinced by farmer, city-folk and suburbanite in Indiana.

The fight against impure milk in Indiana, revived again because of incessant attempts to evade the laws during the past few months, as prophesied in these dispatches last month, materialized to unwonted proportions during September. Here are some of the results of the state department's fight against the dealers in dirty, skimmed and otherwise illegal milk: Twenty-five dairies in the state were condemned during the month, either because of insanitary conditions or improper construction; twenty-one samples of milk examined in the pure food laboratories of the State Board of Health were condemned as illegal, and ten samples of other milk products went the same route; eight dealers were successfully prosecuted in the state for selling dirty or skimmed milk and four were fined for selling illegal milk products. The other two prosecutions by the state department were because dealers sold misbranded temperance beer.

Simultaneously to the outbreak of bad milk conditions in Indiana comes the news that practically all of the country butter being sold on the Hoosier markets is far below standard—due largely to the ignorance of Indiana farmers' wives in proper manipulation of the product.

The state laboratories have been flooded with samples of rancid butter, all of it full of volatile acids and many traces of alcohol. In general the rancidity in the product is accompanied by a small percentage of salt and usually a large amount of curd. Usually, also, the specimens contain a milk sugar.

The state authorities have sent out notices broadcast to the farmers of the state, telling them of the condition of the product and explaining that because of the rancidity the prices of that type of butter have been cut almost in half. Insufficient washing and stirring of the product are the reasons given for the trouble by the state officials. The State Food and Drug Commissioner has estimated that \$125,000 has been lost to the farmers of the state this year because of lack of care in the making of butter. In his estimate he figured only that one pound of butter per week has been made by the wives of the farmers in Indiana.

Ninety-five canning factories were inspected by the deputies during September, and of the number sixty-one were in but "fair" condition. Eight were classified as "poor." The majority of the institutions, however, were passably clean, the state deputies found. The Anti-saloon League in Indiana is swamping the state laboratories with samples of "near-beer" for analysis, and much of it has been found to be illegal either in content or through misbranding.

The commissioner this month attacked the farmers in Indiana because of alleged extravagance along several lines, chiefly because of waste in eggs, due in large part to the premature development of the embryo, the state official declared. He issued a statement to the rural communities in which he advised segregation of roosters after June 1. Such an expedient, he declared, would amount to a saving of approximately three cents a dozen, because of the elimination of waste.

Mayor Shank, the "potato mayor" of Indianapolis, almost stepped back into the limelight again recently, when an Indiana onion grower offered to sell him a carload of the vegetables at cost. The mayor thought about it a while and then decided to confine his activities to potatoes and chickens as a means of bringing down the high cost of existence.

The nut crop in Indiana this year is the largest that the state has seen for a decade. A statement issued recently by State Forester Charles C. Deam told of magnificent crops of every sort of nut, particularly in the southern part of the state, where last year the entire crop was a failure. Mr. Deam said he believed that the enormous crops this year will bring down the prices of walnuts, hickory nuts, beech nuts, butternuts, hazelnuts and chestnuts. Other types of "woods" food products in the state, such as wild grapes, "red-haws," acorns, paw-paws, persimmons, etc., are being harvested in large quantities. In many of the rural communities the farmers have temporarily abandoned other fall work to turn their attention to harvesting these "natural" crops.

AMERICAN MEAT PACKERS' CONVENTION.

The following report from the executive committee of the American Meat Packers' Association was presented at the opening session of the three days' convention of the association at the Hotel Sherman, Chicago, October 14th:

"The developments of the year seem to emphasize the serious situation which confronts the country with regard to its meat-food supply. We have actually reached the point where demand is greater than supply. Our population is being rapidly increased and there is practically no increase in our production of meat-food animals. Even 'bumper' crops are of minimized value if a sufficient number of animals do not exist upon which to utilize the feed. Corn and other feedstuffs cannot be turned into meat unless there is a sufficient quantity of 'feeders' upon which to use our bountiful crops. It follows that the meat shortage is to continue, regardless of crop conditions, until we raise meat-producing animals in proportion to our increasing population.

"It is a serious situation for us as packers, as well as for the welfare of our country. We cannot run our plants profitably without sufficient raw material; we cannot give our customers cheap meat-food products with our raw materials—live stock—costing us more than at any time in the last fifty years. Labor cost has increased within the last decade, operating and overhead charges are higher than ever, and with scarcity of material these cannot be reduced by volume of output.

"Nothing less than a strong awakening of the public to the actual facts will remedy these conditions. We must have more meat-producing animals, or the demand for meats will keep up the price of live stock to such a point that there will be no cheap meat, and no profit on meat for the packer. You should bend every effort to enlist the aid of live stock associations, legislators and public opinion in the movement to stimulate the raising of meat-food animals.

As usual, the packinghouse industry has been the target of misinformed agitators during the year. Notable among the libels circulated is that our beef is sold in London cheaper than in the United States. As a matter of fact our exports of beef have fallen to practically nothing, and in the near future may be wiped out completely. The small amount now shipped abroad is not even quoted on the London markets. But beef from Argentina is quoted as 'American' beef, and as that is of quality inferior to ours, the ruling quotations give our political and press agitators the apparent authority for making misstatements.

"American' beef in London is Argentine beef, and there is a wide distinction between that and 'United States' beef. The fiction should almost contradict itself, for there is not the slightest business reason why our packers should sell their products abroad cheaper than at home, when demand here more than equals the supply.

"The association work during the year has proceeded with little or no friction. We are to be congratulated that through the existence of our organization we are enabled to meet and know each other, to discuss the common problems which confront us all, and to express in open meetings the ideas which improve our industry—not only for our own benefit, but that our customers will be benefited by our better methods of production and distribution—that we may further utilize our by-products and therefore reduce meat costs; and to give our consumers better products, better prepared and sold as cheaply as conditions will permit.

"It is safe to say that no member of this association would go back to the time, only a few years ago, when the packinghouse industry was the only large line of business in which those engaged in it did not have the opportunity of learning by mutual acquaintance the improved methods or more efficient operations of others working upon the same or similar business problems.

"During the year your committee decided that this association should become a member of the Chamber of Commerce of the United States of America, of which the president is Mr. Harry A. Wheeler of Chicago. The chamber is organized for the purpose of promoting the industrial and commercial welfare of the entire country, and in joining it ourselves we believe that all other industrial associations should give it their support.

"We have retained our membership in the American Association of Refrigeration, and would respectfully call the attention of our members to the fact that the international meeting of all the refrigerating interests of the world will be held in this country in September, 1913, under the auspices of the American Association, and as there will probably be two or three thousand delegates in attendance from all parts of the world, the members of this association, both collectively and

individually, should do everything possible to further the success of the meeting, which will be of the utmost importance to the packinghouse industry."

Election of officers will take place on the last day of the session. Nearly a thousand delegates from all parts of the country are in attendance.

DAIRY SHOWS AND LIVE STOCK EXPOSITION.

When a man of practical knowledge coupled with the trained mind of an instructor says "that the educational value of a large dairy show cannot be estimated to men who are endeavoring to evolve the highest standards of efficiency upon their farms and in their dairy at the lowest cost of operation" there must indeed be great value to be had from an attendance at the National Dairy Show in Chicago this year.

Professor Kildee of Iowa Agricultural College is the author of the above statement and believes that lessons to be learned by looking over a thousand of the best representatives of the leading dairy breeds and the information and inspiration gained from coming in contact with men who are foremost in the dairy world, with the chance to inspect the most modern in dairy machinery, all leads to success men who might otherwise blunder along without getting anywhere. He says that the profits derived from dairy farming are determined by the following factors: Quantity of milk, quality of milk, cost of production, and the price obtained for your dairy products.

Thus, it must behoove any man who is striving for success to attend this great educational exhibit. The dates of the National Dairy Show this year are October 24th to November 2d. It will be held in the International Amphitheatre, Union Stock Yards, Chicago.

The International Dairy Show, to be held in the Milwaukee Auditorium from October 22d to 31st, is being advertised as the greatest dairy show ever planned. There will be a very extensive exhibit of dairying machinery and appliances, lectures by experts in dairying and contests of various kinds. It will be a useful educational show and a large number of prize winning entries of dairy cows have been made. The secretary of the International Dairy Show may be addressed at 62 Sentinel Building, Milwaukee.

The International Live Stock Exposition will be held this year in the International Amphitheatre, Union Stock Yards, Chicago. Secretary B. H. Heide has made the announcement that the volume of entries so far made indicates that there will be a larger number than ever of beef cattle and draft horses on exhibition this year. This show attracts much attention from European countries, and competitive entries from abroad will be very numerous. The International Live Stock Exposition will be held from November 30th to December 7th.

THIS COULDN'T HAPPEN IN AMERICA.

Victor Desprats, a modest gardener inhabiting the east side of Paris, has carried the famous French instinct of economy and utility to fantastic lengths. He has, in fact, succeeded in raising a considerable crop of mushrooms at the city's expense, yet without any protest from the municipal authorities, who seem to see in his little scheme only laudable initiative. This is how he does it:

As every one who has been to Paris can never forget, the entire city is green with trees. Most of the principal avenues are lined with handsome chestnuts or plane trees. They add inestimably to the pleasantness of life. Even the open squares are well planted with them. Wherever there is a tree a circle about two yards across has been cut in the cement of the walk. From the center of this the trunk rises. About it is packed good rich earth, and the circle is covered over with an iron grill, which protects the roots of the tree, and at the same time allows of easy watering.

It was while crossing the Place de la Republique one day that it occurred to M. Desprats that these little plots of ground around the trees could be put to good use. His own garden near by was well filled with sunshine, and consequently furnished him bounteously with a stock of flowers and vegetables. The earth under the grills seemed to offer him what he had long sought—a shaded spot suitable for raising mushrooms. Accordingly he quietly put ten of the circles under cultivation. For more than three years he has gone a couple of times a week to gather his crop, which is never less than twelve to twenty pounds of mushrooms a week.

AGRICULTURAL CHEMISTS ELECT OFFICERS.

Dr. H. W. Wiley, former chief of the Bureau of Chemistry, was named honorary president of the Association of Official Agricultural Chemists in its convention at Washington. Dr. Wiley appeared at the closing session of the meeting, thanked his former associates for the honor and outlined the work accomplished by the association. New officers elected by the association are: President, G. S. Fraps of Texas; Vice-President, E. F. Ladd of North Dakota; Secretary, W. D. Bigelow of Washington, D. C., and additional members of the Executive Committee, C. H. Jones of Vermont and R. N. Brackett of South Carolina.

The present membership of the Joint Standards Commission representing the Association of Official Agricultural Chemists is: William Frear, W. B. Jenkins, H. E. Barnard, B. B. Ross and L. M. Tolman. Resolutions were passed on the death of H. A. Webber of Ohio, a member of the Joint Standards Commission who died recently.

OYSTERS DECLARED FREE OF GERMS.

At a meeting of Virginia and Maryland oystermen with the members of the Board of Food and Drug Inspection to protest against a circular sent out by the Department of Agriculture, the fact was brought out that no typhoid germs have yet been discovered in oysters in any of the tributaries of the Potomac, although tests taken both at the Washington wharves and at points along the river showed pollution with sewage, from which colon bacilli has already been isolated. The report, declared Dr. Doolittle, relates to the water in which the oyster is found and not to the oyster itself. He drew the inference that since the polluted waters were found within the oyster shell the bivalve itself had absorbed the poisonous water and had become contaminated.

Attorney General Poe of Maryland and Dr. A. W. Dent declared that neither typhoid fever nor dysentery were prevalent in the sections of Maryland and Virginia from which the oyster is taken.

THE BIBLE ON NET WEIGHTS.

Thou shalt not have in thy bag divers weights, a great and a small:

Thou shalt not have in thine house divers measures, a great and a small:

But thou shalt have a perfect and just weight, a perfect and just measure shalt thou have; that thy days may be lengthened in the land which the Lord thy God giveth thee.

For all that do such things, and all that do unrighteously, are an abomination unto the Lord thy God.

Ye shall do no unrighteousness in judgment, in meter-yard, in weight or in measure.

Just balances, just weights, a just ephah, and a just hin shall ye have; I am the Lord your God, which brought you out of the land of Egypt.

JOHNNY KNEW THE ANSWER.

"Now, boys, I have a few questions in fractions to ask," said a teacher. "Suppose I have a piece of beef-steak and cut it into two pieces. What would those pieces be called?" "Halves!" shouted the class. "Right. And if I should cut each half into two pieces?" "Quarters!" "That is correct. And if the quarters were each cut in half?" "Eighths!" "Yes. And if those were chopped in two?" The answers had been growing fewer and fewer, but one meditated a moment and answered: "Sixteenths!" "Very good. And when the sixteenths were cut in half what would they be?" There was silence in the class, but presently a little boy at the foot put up his hand. "Do you know, Johnny? Well, you may tell me." "Hash!" answered Johnny, confidently.

CHICAGO'S COLD STORAGE ORDINANCE.

The City Council of Chicago has passed an ordinance limiting the time food products may be preserved in cold storage. Under the ordinance no food products, except nuts, fruits, cheese, and vegetables, shall be kept in cold storage for a period exceeding ten months. Butter products can be kept in cold storage not exceeding one year. Fish shall not be kept in cold storage longer than six months. Everything must be marked to show the time it has been stored, except nuts, fruits, cheese and vegetables. The transfer of food from one warehouse to another or its return to a cold storage plant after once taken out is forbidden.

MARKET FOR AMERICAN BEANS IN INDIA.

The demand in Madras, British India, for American cereals and breakfast foods shows rapid development. Beans, however, are imported almost entirely in canned form, and it is believed that a ready market would be found in southern India for the dry product, such as the white navy, kidney and lima varieties.

GIRL WITH GRIEVANCE USES FOOD LAW.

A girl employed in a Seattle candy factory, who had a disagreement with the foreman, got a sanitary inspector into an embarrassing situation recently. In revenge she took a piece of spoiled candy from a lot that was on its way to the garbage can and displayed it to the inspector, who started a prosecution. The case got into the newspapers before its true character was learned.

REMOTE ORIGIN OF FOOD SHOWS.

Waterloo, Iowa, is having a pure food show, and a local historian has unearthed the fact that Waterloo's first pure food show was held fifteen years ago. "At that time," it is stated, "people took considerable interest in pure food and the show did considerable good." Perhaps here is where the idea of a national food law had its inception.

The American Food Journal

will be

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Read the announcement on page 16

Every Meal Calls for

Mapleine

"The Flavor De Luxe"

Begin with Breakfast—add a few drops of Mapleine to sugar syrup and you have an irresistibly delicious home-made syrup to pour over the hot cakes or muffins.

Then at Lunch—for flavoring icings and fillings for cakes, for flavoring ice-cream and milk puddings, in baked beans and other things, you will find that Mapleine adds a rich, mild mellowness of flavor.

And at Dinner—every course from soup to eustard may be varied at will and improved upon by adding a few drops of Mapleine as a flavoring or a sauce.

Mapleine is a delightful flavoring every housewife should have on hand. **Use it right.** Grocers sell Mapleine, 35c. 2 oz. bottle (in Canada 50c.). If not, write



CRESCENT MFG. CO. SEATTLE, WASH.

"Mapleine Dainties"—our recipe book—sent free.

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In Its Own Home—Newly Equipped—The Only Building in America Capable of Presenting a Dairy Show
That In Any Way Represents The IMPORTANCE AND MAGNITUDE OF THE INDUSTRY.

¶ This Show is founded to advance the Interest of the Dairy Cow, as upon her alone rests the Dairy Industry. ¶ We have prepared a TEN DAYS' SHORT COURSE IN DAIRY HUSBANDRY with facilities unequalled in the World.

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The Best Results of the Best Thought on Problems of Breeding, Feeding and Fitting Dairy Cattle, down to the hour.

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Dairymen, Farmers and All Interested in the Success of the Dairy Industry! Can you get such a feast anywhere else?

Show your Hope and Interest in the Future by encouraging those who have spread this Royal Table for you, by your Presence, You Can Make Money By It.

Milk will be pasteurized by the Carload each day; Butter will be made by the Ton each day; Ice Cream will be manufactured Wholesale each day.

To show the City Visitors what a Great Industry you are engaged in.

The Railroads are willing to co-operate if you will tell them how. Commence right now to tell them what you want in Service and Rates.

Write National Dairy Show Association, Live Stock Record Bldg., 17 Exchange Avenue,
Chicago, for any information on exhibit space, or how to get to the Show.

THE UNITED STATES GOVERNMENT HAS GIVEN PERMISSION TO USE SACCHARIN

if the article containing it bears some such label as the following:

"This (————) is sweetened with Saccharin for the
benefit of those to whom Sugar is harmful or deleterious."

In cases where Saccharin is used in articles which contain Sugar naturally, the
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"This (————) is sweetened with Saccharin for the benefit
of those to whom an excess of Sugar may be harmful or deleterious."

Such labels carry an argument in favor of the use of Saccharin instead of sugar.

It is a well established fact that sugar is harmful to many, whereas, the Referee Board of Scientific Experts have determined after a long and thorough investigation, that Saccharin is neither harmful nor injurious to normal persons in the quantities in which it is practical to use it in food products, and further, that Saccharin does not alter or affect the quality of the food, and has so reported to the Secretary of Agriculture.

Saccharin is not intended as a food, but simply as a condiment to give taste to the food the same as salt or pepper.

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THE AMERICAN FOOD JOURNAL



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NUMBER ELEVEN

Chicago, November 15, 1912

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2 tablespoonfuls lard or butter, melted
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1 tablespoonful salt

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THE AMERICAN FOOD JOURNAL



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Conventions, Meetings, Expositions *The Annual Round-Up*

The season for conventions, conferences, fairs and expositions is at hand. It is the finishing of the year's activities. We have done something this past year and we pause to take stock and see what the other fellow has done as well. Business, as such, we lay aside. Someone has defined the sportsman as a man who is willing to tell others of his good things, while the business man keeps his good things to himself and carefully guarded. So the attendant at the convention or exposition gravitates naturally into the sportsman class. He says "we" instead of "I." He is on pleasure bent, as well as to learn what he may from his fellows. He is a mixer then if at no other time in the year—a good fellow, with heart overflowing with love for his fellow man—a sportsman who wants to show what he has bagged and where and how he bagged it. Convention and show, conference meeting and fair, at this time of year, fix a certain type. It is the man who both learns and teaches, who is the missionary from and to his own community, the connecting link between definite progress and that indefinite state which is neither progress nor retrogression.

The convention has several features. Usually there is much scientific knowledge imparted. That is next in importance to the commercial or executive features of the trade or profession in whose interest the convention is called. To grease the wheels—that is all important. There are social features also, automobile rides and banquets, with village cut-ups to the fore. In all, the convention develops much enthusiasm, of several different kinds. Sometimes snags are struck. These are then either pulled up or charted, after much excitement. The Department of Agriculture has furnished more snags for organizations having to do with the production and distribution of our food supply, than any other agency we know of. Usually the department furnishes a pilot, or several pilots, to carry the craft around the obstruction.

Eventually the packers of animal and vegetable food products will solve the problem of the cost of living.

The Department of Agriculture and the other agencies having an interest in food production and distribution are taking a greater interest in the questions involved in the preservation of foods in times of abundance than ever before, so that in times of scarcity prices will not be unnecessarily high. The declaration of one expert that fresh eggs would cost two dollars per dozen in January if it were not for cold storage is not an exaggeration. The sterilization of milk, vegetables, fish and meats by the well-known processes in use in canneries and packing houses is doing much toward this same end of reducing the cost of living. There are many examples of this in milk, corn, oysters, salmon, green peas, tomatoes, fruits, etc. Fresh vegetables and animal products that would be held at prohibitive prices if sold out of season in natural form, are delivered at our doors in hermetically sealed cans, at prices actually lower than the same amount of food could be had in the height of the plentiful season if bought to the best advantage.

Let us review the annual gatherings of a few of the organizations that are our principal agencies in not only the distribution of our food supply but in lowering the cost of living by conserving the fresh food and making its transportation both feasible and inexpensive.

The American Meat Packers' Association.

The American Meat Packers' Association met in its seventh annual convention in the Hotel Sherman, Chicago, on October 15th, 16th and 17th. It demonstrated by the vastness of its membership and the country-wide scope of its activities that all that has been said of monopoly in this industry is largely apocryphal. Among the delegates were representatives of the big packing houses of Chicago, Omaha, Kansas City and East St. Louis, and men from small communities and from plants whose output is so small as to be insignificant in a comparison with the whole industry. A study of the officers of the organization,

elected on the final day of the convention, is convincing of this one fact of absence of monopoly in production, and, taken with the spirit of the convention, one of helpfulness to the public and a real desire to solve the genuine problems of production and distribution, must convince the intelligent observer that monopoly only exists in the desire to do the right thing by the public. The new officers are:

President, Gustav Bischoff, Sr. (St. Louis Independent Packing Co.), St. Louis, Mo.

Vice-president, C. H. Ogden (Pittsburgh Provision & Packing Co.), Pittsburgh, Pa.

Secretary, George L. McCarthy (*The National Provisioner*), New York.

Treasurer, Chas. E. Roth (J. C. Roth Packing Co.), Cincinnati, Ohio.

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The closeness of the packers to their work is shown best in the address of C. W. Ashcraft, President of the Inter-state Cottonseed Crushers' Association, who spoke nominally on a subject relating to his own trade, but who really, in the course of his remarks, sounded the keynote of the convention, the duty of the food producer to the public. We quote from Mr. Ashcraft's address:

If I were called upon for a definition of a patriot, I would say he is a producer of happiness. We are too prone to think of patriotism as flourishing only beneath the fluttering flag or amid the cannon's roar.

To my mind, the man who cures a ham, packs it in an attractive canvas and arranges for its transportation to the needy hungry, wherever there is need or hunger, should be accorded a higher place as a patriot than he who goes with musket or sword to produce misery and death.

The men of the South as soldiers, both rank and file, earned for themselves undying fame. But returning from the war and taking up the pursuits of peace, they have established the name and fame of their beloved country in the hearts of the needy world over. Taking up the work of readjustment and rebuilding, the work of construction instead of destruction, they have converted forest into field and waste place into garden. They who were once master and slave now march side by side in agricultural and industrial life, converting the land into a blessing at home and a benefactor throughout the wide, wide world.

And it is no matter of ancient history when forebodings of hunger and distress haunted the growers of livestock in the West, until necessity, the mother always of invention, compelled the production of refrigerated cars and otherwise applied refrigeration to the packing house business. Farmers still live who burned corn for fuel. Would anyone of you hold before your sons as the ideal life one of the military geniuses of the world in preference to the men who have devoted their lives to reconstructing conditions so as to give food at moderate prices throughout the world, and at the same time make an adequate market for the abundant crops of the West by feeding and marketing live stock?

When every other test of fidelity had been applied the climax was reached in the command, "Feed my little ones." And in the final day the supreme test applied to your life will not be your record as soldiers or your reputation as financiers, but if you are given a welcome into eternal bliss it will be because you found the hungry throughout the world and sent them food. Men who take raw material, congested in overabundance in some districts, and prepare it for use, devise means of transportation and distribution in needy quarters, are exemplifying the highest order of patriotism, and that is what the world finds you doing.

With abundant yields of grain and therefore abundant supplies of livestock, the western farmer found himself abso-

lutely impoverished with his wealth until you, Mr. Packer, made a market for him. And the hungry in other parts of the world were starving, unable to reach the abundance of the West, until your industry discovered the way and built the transportation facilities that successfully distribute and at the same time richly improve the quality of these products in every quarter of the globe.

But there is more danger to you and me alike in the pursuit of our business than to many in other lines. Just as our opportunity for serving the world is greater, so also is our danger of moral degeneracy greater.

For instance, if a lawyer becomes over zealous in his profession, he may injure his health by overwork or may be called a fanatic or crank, or may otherwise receive the ridicule of his fellows. But the effect on society is beneficial instead of harmful, for his activities secure a closer attention to law, violators are less bold in their activities. Suppose a physician is over zealous. Disease is met and conquered, suffering is palliated, the distressed comforted. Society is blessed and the sum of human happiness enlarged.

But suppose you and I become fanatic and the greed for gain supersedes the patriotic desire to serve. Can tongue or pen describe the misery and want that might follow? "Beware, oh man, how thou buildest a wall about that which is God's, and callest it thine own." The zealous lawyer's success finds expression in better social relations, and lawyer and client grow strong together. The zealous doctor's success finds its expression in a strong healthy body and therefore a healthy mind and heart.

But your success and mine might find expression in the cold, irresponsible dollar. Close relation with it can finally make us close and selfish, over zealous in gaining it as representing our success, and we run to innumerable extremes, dangerous alike to ourselves and society.

Some of the logical results would be unholy combinations to control and direct the products of toil into channels for selfish ends, regardless of human deprivation and suffering. Personal ambition would run riot and the common good lack an advocate. In the midst of abundance the people would starve, and with raiment everywhere the unfortunate go naked and cold. Palaces could crown the high places, but they would rise from a sea of squalor and misery. Ignorance and prejudice would menace the very foundations of our institutions.

But the evidence is on every hand that oil mill men and packers are truly patriots. Calling to their assistance the brightest intellects of the world, they have converted waste products into mighty articles of commerce. Calling to their assistance the inventive genius of the world, they have discovered and applied the secrets of nature in refrigeration, and the principles of mechanics in transportation, until no quarter of the globe remains of necessity unsupplied with the choicest products of our toil. Calling to their assistance the financial geniuses of the world, they have developed trade relations in every quarter, so that our favorite sections no longer seethe with the decay of superabundance because of inadequate markets, while other parts of the world famish and die of want that cannot be supplied.

According to my understanding of its teachings, I am an earnest believer in the Christian religion, and love the work of the organized church with every energy of my soul. I believe that through its agencies must and will be attained that ideal of peace on earth, good will towards men, when the kingdom of God shall come upon earth, as it is in Heaven. But I do not believe that these attainments can ever be realized through visionary methods, but must be attained by the practice of practical religion in every-day life. Men are commanded everywhere to be "Doers of the word, and not hearers only." Each of us, gentlemen, have our part in this great task, no less than the clerical element in our society.

National Poultry, Butter and Egg Association.

A feature of the convention of the National Poultry, Butter and Egg Association was a dinner of cold storage products. The menu is worth reproducing, particularly as the guests praised it very highly. The "South Water Street appetizers" were Martini cocktails.

South Water Street Appetizers.
Celery. Olives. Salted Almonds.
Cream of Chicken, Sultane.
Aiguillette of Whitefish, Cardinal.
Potatoes Persillade.
Vol-au-Vent of Sweetbread, Financiere.

Fresh Peas au Beurre.
 Sherbet Emaraude.
 Breast of Guinea Hen, Virginia.
 Red Currant Jelly.
 Chiffonade Salad.
 Mousse of Strawberries, Glace.
 Assorted Cakes.
 Roquefort Cheese.

Crackers.
 Cafe. Cigars. Cigarettes. Apollinaris.

Among the speakers at the banquet was Miss M. E. Pennington, the Department of Agriculture's expert on cold storage. Miss Pennington said:

I am here from the Department of Agriculture. The department, as you know, has been working on this subject of cold storage for five or six years at least. Now we think that the best motto that we can give to what we have to say concerning cold storage might be properly phrased in this way, "Let us enlighten, not frighten." You see, as we had to learn ourselves what was the truth of the matter, and having learned it it became our duty to tell just as far as possible the truth as we saw it, and it is very strange to find in this enlightened age and enlightened country how few people seem to know anything about the truth outside of their own little experience and their own simple views and observations. When it comes to a subject like cold storage, where products are enclosed inside of walls without windows, we are almost as ignorant as the small boy of the slums who was taken to the country for his country week and, going down to the pasture in the evening, saw the cows meditatively chewing their cuds, chewing, chewing, chewing, along the fence. He turned to the farmer and said, "Mister, do you have to buy gum for all of them?" It seems a very ordinary thing for a country boy to understand the cow chewing her cud. I don't know but what a great many of us are just as ignorant of other ordinary things. We seem to think that the hen will lay her eggs all the year around so that we may have every day an egg that was laid certainly not later than yesterday. We are a hard-working community ourselves and we expect everything else to be. Broiling chickens we think of as coming early in the spring, and so along about June our housewives say to the butcher, "Now I want a fresh broiling chicken." Well, Providence didn't provide for broiling chickens in June, but she can get one from the last season, and it will be a very good chicken if you take it out of storage. We seem to want things in what the laity terms the natural way. We want a thing fresh. Well, now, a good deal of that depends upon what is the natural way. For instance, I heard the other day down in the south this story. There was a kindly passer-by who gave a small darkey a dollar and asked him to get him a turkey. The darkey trotted into his mammy and showed her the dollar. She said, "You Sambo, you give me dat dollar bill." Sambo clung to the dollar bill. He said: "No; the gentleman give me dat dollar bill to get a turkey for Christmas and I se going to get it." She said: "Sambo, you give yoh mammy that dollar bill." "That is my dollar bill; that ain't your dollar bill." So finally Sambo, with tears running down his black cheeks, yielded up the dollar bill. "Now," she said, "Sambo, you go out and get that turkey in the natural way." So you see it gets to be rather of a puzzle sometimes as to what is the natural way of getting things out of season that we insist upon having to eat.

But, laying all joking aside, here we have a very serious problem. We are a pampered nation. We insist on having things out of season, and, thanks to cold storage, we have had them so long that we really can't get along without them, and in these last two years that they have learned that they came out of cold storage rather than out of the chicken coop, or rather than right out of the water, it has been a shock to us. Now, here is the key to the situation. If we just knew where these things came from and when they were prepared I think we would enjoy our daily provender just as much as we have enjoyed this banquet tonight. Because, in addition to the actual quality of the food itself, its palatability and its nourishing qualities, we have the mental interest which attaches to one of the wonders of the modern world, that is, the handling of our foodstuff in season and out of season from long distances, from the producing centers to the consuming centers. Just imagine, now, for instance: You know when you get to be old you are allowed to reminisce, and as I am one of the oldest members of your association, I am going to reminisce a bit.

Not very long ago I was up on the coast of Massachusetts and had to get up at 4 o'clock in the morning, fortified with a truly New England breakfast, coffee and squash pie. I went down into the harbor to see the fishermen draw their nets, or catch, rather, and I followed that catch to the freezer up there on Cape Cod. I saw the fish started for the ice, washed in fresh salt water, put in bins and dropped down into the freezer, which was at zero or thereabouts and some of the fish were so fresh that were put down into that bin and went into the freezer that they were frozen with the wiggle in their tails, literally. Now, don't you think that that fish, hard frozen, in about a dozen hours or thereabouts, after it came out of the water, handled in a cleanly fashion, are finer when hard frozen in clean boxes, shut up tightly, than a fish which has been handled from one hand to another, in and out of carts, on and off stalls, until finally it comes to you in a very bedraggled condition? I would rather have that fish hard frozen. In fact, that is the way we have them at our house. The housekeeper came to me not long ago and said: "I think we will have to begin drawing on the storage eggs." I said: "It is very early, and the stock must last until the next season, and it is beginning very early." "Well," she said, "just send me out some storage eggs for eating purposes and I will get fresh eggs for cooking purposes." And when we want good butter—well, I have about 216 pounds of butter in storage, and I am happy to say that will last our family for a year.

About a week or so ago I had the opportunity of eating some corn which had been hard frozen on the cob and which had been kept in a freezer for six weeks. I took that corn out myself and let it lay until the husks could thaw off a little bit, and then I put them in a kettle of boiling water, and I think no one could have told that corn had ever been frozen. So far as I am aware, that was the first time that thing has ever been done. If anyone else who has a freezer handy and a corn field in proximity can tell me of another case I will be very glad to hear about it. So far as I know that was the first ear of corn artificially hard frozen that has ever been used; but I do know this, that next year I will have some corn put away for the family hard frozen.

I say it comes down practically to saying that you know what the thing is, sell it for what it is, send it to the consumer for what it really is, not telling a big, long story about this or that or the other thing, by the retailer, which has absolutely no foundation in fact. It is not very hard to get your retailer to tell you the truth, either. All you have got to do is to show a little interest in his business and he will be on your side.

Now, I am going to reminisce again a little. I heard a conversation over the telephone the other day. Being interested, I took off another receiver in the house and listened, and this is what I heard: "Hello, hello, hello! Is Mr. Blank there? Is this Mr. Blank's store?" "Yes, it is. No, Mr. Blank isn't here." "Well, that chicken you sent us down today has been thawed and it is not in very good order. I would like to have another one, please, hard frozen." "We don't have any frozen goods here, madam; our stock is perfectly fresh." "Oh!" she said. "Is John Blank in the store?" "Yes, madam." "Just call him to the 'phone." John Blank now comes to the 'phone. "Good morning, Mrs. X." "Good morning, Mr. Blank. That chicken you sent down today has been thawed out. Haven't you any hard frozen chickens?" "Oh, yes, a whole lot of them." "I much prefer hard frozen chickens." "Certainly, we will send you down one, madam." Down goes the hard frozen chicken, and it is a good chicken. Now you see, that wasn't hard, but as for the clerk, they had been trained to say to the customer that they had no cold storage goods, because most housewives would have promptly refused to accept anything which the clerk owned up to have come from cold storage. But I firmly believe that we will see, as Shakespeare says, "To thine ownself be true, and it will follow as the night the day thou canst then be false to any man." And we must, more or less, in this day and age of progress, worship the good things as they are, and we must strive for the best that we can. Certainly when the producer is a thousand miles away from the consumer and when the consumer insists upon having fresh goods the year around, the best we can say for ourselves is to wish that all the good products that we handle now in cold storage, the products of the year 1912, may be incorporated into strong men and women before the season of 1913.

The National Poultry, Butter and Egg Association was in convention in the Hotel Sherman, Chicago, from October 28th to October 30th. The banquet was held the evening of the 29th. The delegates were wel-

comed by Mayor Carter H. Harrison, and a response to his address was made by Francis A. Winslow of New York, counsel for the association. The first day was taken up by routine work, reports of committees and appointments.

The second day, Tuesday, October 29th, A. M. Cochran of Columbia, Tennessee, spoke on "The Poultry and Egg Industry of the South," and Miss Pennington spoke on "Scientific Management in the Poultry and Egg Industry." Addresses were made on Tuesday and Wednesday by G. L. Hubbell of St. Paul, Minnesota; Robert H. Essex of Buffalo, New York; Porter Fitch of New York City; Jessie J. Naive of Nashville, Tennessee, and P. O'Hearn of Minneapolis. On Wednesday afternoon officers of the association were elected as follows: Harry Dowie of New York, President; William H. Whitcomb of Chicago, Vice President; Charles E. McNeill of Chicago, Secretary; P. F. Combiths of Chicago, Treasurer.

American Bottlers' Protective Association.

The twenty-fourth annual convention of the American Bottlers' Protective Association was held in New Orleans October 15th, 16th and 17th. Much important work was done and the national organization was strengthened by the enrollment of the state organizations of Michigan, Illinois and Louisiana. Sanitary production of bottled beverages was much discussed and the keynote address on this subject was delivered by Dr. Oscar Dowling, President of the Louisiana State Board of Health, and a man who has made a record along constructive lines in sanitation. We quote from Dr. Dowling's speech as follows:

In the suggestive column, "Pops," of the *American Bottler*, issue of August 15th, there appeared the following: "The future of the bottling trade lies in pure and wholesome goods, manufactured under perfect sanitary conditions." This brief statement implies on the part of the writer a knowledge of the present widespread hygienic movement, a grasp of commercial conditions and a comprehension of the most advanced notions of modern business ethics.

In the social progress of the past thirty years there is apparent a well-defined attempt to further the cause of physical well-being. Within a decade the effort has become almost universal throughout the countries of the civilized world. So much so that an authority in a recent book says: "The interest of the nation in hygiene is the index to its civilization."

An important feature of this health propaganda is investigation of the food supply, its quality, manufacture, cost and effect on the human machine. In relation to quality, as you know, there has been published much entirely sensational, but much, too, that has been proved true; for example, the practices of the meat packing houses as shown up a short time ago. That there is temptation to such gross fraud is a reflection on our social and business ideals. The investigations have covered every aspect of the food supply, adulterations in various form and degree and conditions under which manufactured.

Many different causes have led health experts into more scientific analysis and serious consideration of the food problem, in relation both to human economy and the prevention of disease. Perhaps the most compelling is the number of new victims yearly that succumb to alcoholism, and the increasing death rate from diseases of the degenerative type, notably Bright's disease. The figures relating to this phase of mortality are appalling, the death rate from diseases of the blood vessels and kidneys having increased 100 per cent since 1880.

Naturally, medical men feel responsibility to find the source of this increase in vital waste, and some have pursued the theory of adulterated foods as one of the primary agencies. Their experiments are yet too recent to warrant many definite specific scientific conclusions relative to the cause of some modern diseases, but that there is danger to general health in foods preserved with harmful chemicals needs no argument. Chemical foods are only imitation foods—robbed of their nutriment. In addition, their use permits all kinds of frauds, including the utilization of factory refuse and waste that

otherwise would be carted to the dump. Death and disease lurk in artificial, chemically prepared matter.

The high prices of food products within a few years has given rise to many experiments in the relative value of food principles, which in turn has developed the notion of a balanced ration. While yet in the elemental stage, it is believed from facts already proved that an exact science of diet may be evolved.

These developments make certain a continued growth in the public demand for additional means of safeguarding this form of supply. The unscrupulous will succumb before intelligent concerted action; the law makers will obey the mandates of an enlightened public.

It is to the credit of your organization and the business you represent that the effort to give a pure article is so widespread among you. The consumption of bottled products is enormous. In a city having one-tenth the population of New Orleans, one soft drink establishment averages a service of two thousand people a day. Multiplied by five, which, of course, does not include the total number of stands in the city, ten thousand people are served each day. From records of some wholesale houses in this section, it appears that the use of bottled waters and other beverages is increasing in equal ratio. Even in the remote rural districts every country store, almost, now carries as part of its staple stock goods of this character.

The significance in relation to public health needs no argument. This increase in the sale of bottled beverages is due to the pleasing quality of the drinks, their inexpensiveness and, incidentally, to a wider knowledge of carriers of infection. The campaign to eradicate typhoid fever in many sections has had an effect in teaching the dangers that lie in polluted water.

Having the searchlight of science thrown on food means that every product for human consumption will have to meet the standard set by the public. Therefore, it is wisdom to recognize that as the knowledge of the people becomes more and more exact in this branch of human economy, their demands for a pure and wholesome product will become more insistent.

From the efforts of state and local health officers the public is awakening to the question of cleanliness in the handling of foods. Dairies, markets, bakeries and groceries not up to the standard are coming under the public ban. In a short time, wherever the health educational movement is in progress, these places will have to be clean or they will go into the hands of a receiver.

Insanitary conditions are objective; in many communities attention is centered on these supply establishments, and it is only a question of time when the producers and purveyors will be convinced of the necessity for cleanly environments. Enough has been done to warrant this conclusion.

There remains in the suggestion from "Pops" the ethical phase. This in business today is less widely appreciated than the commercial aspect, but none the less there is a dawning perception of changed ideals.

Early customs of trade, decisions of the common law, and theories of evolution and democracy, combined through the ages to make the ethics of business a war between the producer and consumer. In the very early history of exchange of commodities, each, the merchant and the customer, was afraid of the other to the extent that each treated the other as a thief. With some modifications, this attitude obtained for many centuries. In the history of today what the fundamental principle business is has become a question of national significance. The investigations of the Presidential campaign fund, the discussions of tariff and other subjects of economic import, the manufacturer in relation to the wage-earner, all imply that standards of conduct in commercial activities are under the fire of criticism.

It is a day of social awakening, of adjustment to the idea of mutual good and oneness of interests of the individuals of a community. No feature of the system has escaped analysis; few adverse criticisms; business methods least of all. Many writers on the sociological aspects of modern life affirm that underlying the method of today, in all commercial enterprises, there is the same spirit that existed more than two thousand years ago. In those days Phœnician merchants left their goods upon the beach and rowed out from shore before the purchasers would come from their hiding places to examine the commodities. These critics assume that business today essentially is founded on the principle that each party must do what he can to outwit the other.

Whether this be true or not, the fact remains that right ethical standards are becoming clearer to an increasingly large number; therefore, if the element of distrust and fraud was fundamental in the past in buying and selling, it cannot

continue as a policy in the future with profit to the manufacturer or the producer.

Other speakers were Thomas E. Lannen, Counsel for the Chicago Bottlers' Protective Association; Frank P. Carr, President of the American Bottlers' Publishing Company; Abram C. Golden of Boston; August de Clerk, President of the Illinois State Bottlers' Association; A. J. Crowe of Hattiesburg, Mississippi, and Carl Zerwikh of Pekin, Illinois.

The social side of the convention was so arranged that it interfered in no way with the business at hand, and work and play were kept entirely separate. A theater party at the Orpheum, a Creole dinner at the old Spanish Fort, located on the borders of Lake Pontchartrain; a boat ride around New Orleans' wonderful harbor, and fifty miles up the Mississippi were the chief features of the entertainment program. While the men were attending to business the lady visitors were shown many points of interest of the quaint old city in automobiles.

National Association of Master Bakers.

The fifteenth annual convention of the National Association of Master Bakers held in the Seelbach Hotel, Louisville, Kentucky, from September 2d to September 6th, was a gathering of much importance. The questions discussed were chiefly trade problems, but the question of enlarging the field for bakers' bread, opened up a year ago and brought prominently to public attention by Mr. Paul Schulze of Chicago, was again touched upon, this time by Mr. Jay Burns, a prominent baker of Omaha. In the course of his remarks, Mr. Burns said:

If all the bread consumed in this country were supplied by the bakers our problem would be vastly different, but such is not the case; in fact, only 30 to 50 or 60 per cent is supplied by the baker. That such a large, undeveloped field exists makes our problem unique, different from that of almost any other industry. Were you to engage in the banking business, the dry goods business, the shoe business, or in the manufacture or sale of almost any other article of human consumption, you would be compelled to divide the total purchasing ability of your community with the others now engaged in the same line. No one person or firm could materially increase its business save as it took away the business from some one or more of the other persons or firms engaged in the same line of business. How different is the baking business! Fully one-half of the purchasing capacity of the average community is absorbed by home baking—the other half or less being divided between the bakers.

When I see the jealousies, frictions, and lack of harmony between bakers in the same community I am reminded of the boys who were discovered fighting desperately for the possession of two apples which they found on the ground, only to learn that there were more fine apples on the tree above them, to be had for the picking, than they both could eat.

Our problem is, then, one of materially improving the physical conditions of all bakeries, and the quality of all bakery products, or of separating the "sheep" from the "goats"—the good bakeries from the bad—of teaching the housewife to discriminate between bakeries, as she does between milkmen, or between doctors, or dressmakers. Shall we continue to give our time, brains, energy and resources to persuade this bad baker to join our Association? Shall we longer try (for a paltry contribution of \$5 or \$10 per year) to teach him modern ideas, system, business management, the necessity of high ideals and standards of sanitation and cleanliness, and spend years of effort remodeling him into a business man? By the time his education would be accomplished we would find dozens of others who had entered the field in the meantime, and who would, in turn, have to be solicited to join us. The work of regeneration would never stop. Where is the return to us from such proceeding?

What is needed more now than the doing of this philanthropic work of bringing in and educating these raw recruits is that this Association undertake the education of the housewife on the difference between good bakeries and bad bakeries; between bread made in a sanitary factory, under

clean processes, by clean employes, and bread made in the indifferent and insanitary shop. Teach her to ask for branded breads coming from certain shops who have qualified for membership in this organization.

Let this Association now stand for something big and constructive, and let the members who put up the money, and who supply the brains, get the benefits of their work. Let us have people know that an association bakery is worthy of their patronage.

Let us acknowledge that there are bad bakeries, and admit that suspicion against bakers' bread is justified to a great extent, but have the public know that we members of this Association do not countenance such bakeries, and that we deprecate their existence as much as they do. Tell them that the bakeries run by members of this Association are not that kind of bakeries, and that we hold ourselves above the common herd. Warn the housewife to patronize the association bakery for her own protection, and not to be persuaded to take the bread offered her by the grocer as just as good. Tell her to take no recommendation from the grocer for any other bread. Tell her to take an interest in bakeries, and visit the association bakery, then go to the other kind. By such a campaign of help this Association could do the business, as a whole, immeasurable good, and help each individual member in such a substantial manner as to make his membership an invaluable asset.

The plan I propose is to establish a rigid system of inspection of the bakeries represented in this Association. Make compliance with certain conditions and regulations as to cleanliness and sanitation compulsory. Establish our own pure food commission by adopting a standard of purity of materials used, and the proper handling of the finished product. Have our own inspectors to see that every member complies with these rules and regulations, and make membership revocable at any time for failure to live up to the standard set by the Association. Issue a certificate of membership from year to year, and let it specify that the same may be revoked for failure to comply with the regulations. Give each member a sign to be displayed at his bakery and allow him to use an association label, and to advertise the fact in his local papers and in other ways that he is a member. Then let the public know through mediums of national circulation that this Association stands back of every bakery displaying this sign, or whose bread bears this label. Tell the public what the conditions of membership are, and how we see to it that they are complied with. Ask the public to visit the association bakeries, and advise our secretary of any criticism it has to offer. In this manner we can collect the opinions and suggestions concerning our members in any town. The suggestion that the public may take advantage of our invitation to visit the association bakery in his town will help to keep each baker in proper shape to receive visitors at all times.

Under such a plan every member will have a valuable franchise which he could not afford to lose, and which would enable him to make his own advertising doubly effective. With the National Association pointing to only certain bakeries as being fit to patronize, how long will it be until every baker of any consequence will clamor for a franchise and a membership with us? He could not afford to stay out, no matter what the cost would be. Before being taken in as a member he would have to comply with certain conditions, and fit himself to pass the necessary examination by our inspector. And so you see when he is made to clean up and run his business right we will have elevated him to a standing among us quicker and more effectively than could be done by the present slow process of begging him to give us five dollars and become a member, and then spending years of effort to make him of some use to the Association.

By our present plan we are trying to educate the baker and then turn him loose to educate the housewife. This new plan makes his education certain by compulsory methods, and in a short while; and at the same time the plan provides for the education of the housewife on a scale never before attempted.

Co-operative advertising by local bakers in a community (unless this or some similar plan is followed) does not solve the problem, for there are bakers whose product does not deserve to be classed as better than the housewife's. Just to advertise bakers' bread, telling the housewife that any bakers' bread is worthy of their patronage, is a mistake, for it is manifestly an untruth. Besides, this classes all bakers together; and what a woman may know about the bad bakery would apply to them all, in her judgment. If the modern, sanitary bakery enters into such a coalition with bakers whose plants are notoriously offensive to people living near them,

or who have been through them, they cannot be expected to be classed as being any more worthy of patronage than the insanitary fellow with whom they associate. To join hands with a fellow who runs an insanitary shop, who has not enterprise enough to put his bakery in proper shape to command respect, and who conducts his establishment on a lower standard of cleanliness and business methods than you do, is to invite to yourself the same stigma that attaches itself to him by the people who know him and his place. What does it avail you to conduct your bakery properly when you go to the public and say that he is just as good as you are, and that his bakery and his bread are as clean as yours? It is as illogical to assume that you can do your business reputation good by associating with and endorsing this other fellow who is below your standard as it would to go try and have people believe you honest when you associate with dishonest men.

The convention was held in conjunction with an exhibition of bakers' machinery and supplies at the Armory in Louisville, that was by far the most ambitious thing of the kind yet attempted in this country.

United States Brewers' Association.

The fifty-second annual convention of the United States Brewers' Association was held in Boston, September 18th, 19th and 20th. The delegates were welcomed by Mayor Fitzgerald and D. Fletcher Barbour of the Boston Chamber of Commerce. The questions of prime importance discussed at the convention were the legal and social aspects of the brewing industry. The attitude of the organization on these questions was set forth fully in the report of the Board of Trustees, from which we quote as follows:

During the past year the active work of the United States Brewers' Association has been extended in every department, and new work of a permanent character undertaken by several of the standing committees. The demand upon the Association for information and counsel is growing continually, not only on the part of our members, but by those whose interest is entirely uncommercial. Students of social legislation and municipal government, publicists, journalists, and professional men in the ranks of law and medicine, and even the ministry, have come to recognize that we keep in touch with all phases of the alcohol question, and that the information obtained is so arranged as to be available for ready reference.

The Advisory Committee has been constantly employed in advising our members in regard to labels and other technical matters, particularly in connection with interstate shipments. The laws of several of the states are in conflict in regard to the requirements of the labels used on bottle beer. For instance, there is a law in Nebraska which makes it compulsory to give the net weight of the beer in the bottle, and its alcohol content, and also requires the use of the words "intoxicating liquor." In Michigan, the law requires that the package shall be labeled "pure and without drugs or poison."

Such laws are not in conformity with the provisions of the Federal pure food law, and it is evident that steps must soon be taken to secure unification of the State label laws.

The agitation for the definition of "what is beer" is still going on, but it is not receiving very serious consideration in the public press, principally because of the very general suspicion that the agitation has not been promoted in good faith. It was clearly shown at the beer hearing conducted by the Secretary of Agriculture and by Dr. Wiley last year, that the agitation was "personally conducted" by a barley expert connected with the Society of Equity, which has a large number of barley growers in its membership. While it was perfectly proper for such an organization to endeavor to extend the barley market, its method of doing so is certainly open to question. Moreover, it has shown that its motive is entirely selfish by opposing the plans of the Crop Improvement Committee of the grain exchanges to increase the barley acreage and improve the quality of the product. The United States Brewers' Association was the first great industry to advocate the passage of the Federal pure food law, and has consistently upheld it. We have at all times co-operated with the Board of Food and Drug Inspection in its enforcement, and we welcome the first-hand investigation which the Board is now making of brewing methods and materials.

The discussion of the liquor problem is beginning to take on a more practical character. It is now pretty generally conceded by all impartial observers that the experiment of pro-

hibition has proved a failure in all settled communities. There may be many small villages and hamlets where there is no need of a saloon for social purposes, since all of the inhabitants are decently housed, and are too widely scattered to be neighborly. A restaurant cannot live upon the custom of the occasional wayfarer—it needs a reasonably steady and constant business to pay the cost of operation. Generally speaking, a place that is not big enough to support a restaurant, does not need a saloon. Of course, this does not mean that such communities are made up of total abstainers—the mail order business flourishes in rural hamlets, and there are probably hundreds of thousands of farmers who make cider for their own use. It is, however, safe to assert that wherever there is sufficient demand to warrant the maintenance of a place where liquor can be bought and served for consumption upon the premises, such places exist, whether sanctioned by law or not. This is true of all prohibition towns and cities in this country and in Canada, as well as in other countries.

In the main the business of the saloon is to supply the demand, not to create it. Possibly the frugality of the race might be increased if candy and coffee, chewing gum and cigars, ice cream sodas, pickles, and other things that are not absolutely necessary to sustain life were to be put under the ban. Whether the people would be as happy and contented is another question. The only class of men who follow a prescribed regimen are the inmates of a Federal prison, who are sufficiently fed and watered at a per capita cost of about eleven cents per day, but their enforced dietary does not apparently lead to the formation of hygienic habit, and as soon as they return to freedom, they follow their natural inclination just the same as all the rest of us do. The trouble with the prohibitionist is that he leaves human nature out of his calculations.

As a matter of fact the total abstainer is a real beneficiary of the drink business. He gets the benefit of all the modern conveniences in the hotels and restaurants at less than cost, because of the profit that the drinking man contributes for the maintenance of the establishment. The sands of time are strewn with the wrecks of temperance hotels, and the few forlorn survivors have a hard struggle keeping above the water that they furnish so gratuitously. The common sense way to deal with the problem is to provide a limited franchise in the form of a license to operate drinking places to meet the real demand for them, conditioned upon strict observance of regulatory laws. The authorities do not need an inspector's badge or a search warrant to enter the premises of a licensed resort. The public can protect itself by its own custom, for all of the operations of the establishment are open to public observation.

Of course, indecency and disorder must not be permitted in any place of public resort, whether it be a hotel, a saloon, an ice cream parlor or a department store, and misconduct must be suppressed not because it occurs in a saloon, but because it is misconduct and therefore constitutes an offense against public morals. It is not so many years ago that the tea houses in London were the notorious resorts of dissolute characters, who made them the rendezvous for evil purposes. But the great tea merchants established their own retail shops for the sole purpose of selling tea and the disreputable tea rooms were crowded out of existence by force of honest competition.

Pennsylvania Ice Cream Manufacturers.

More than 200 delegates to the Association of Ice Cream Manufacturers of Pennsylvania attended the annual state convention in Pittsburgh, Pa., October 22d and 23d. Many of the delegates were accompanied by the ladies of their families and the social features of the gathering were enjoyed in a merry round of entertainments. The headquarters were at the Fort Pitt Hotel, where the business sessions and banquet were held.

At the opening of the convention on the afternoon of the 22d, Mayor W. A. Magee of Pittsburgh welcomed the visiting delegates to the city, and the formal response was made by Attorney S. S. Robertson on behalf of the visiting ice cream men. The program follows: Talk by Dr. Doolittle, of the United States Bureau of Chemistry; "The Benefit of the Association to the Larger Manufacturers," E. C. Sutton; "The Benefit of the Association to the

Smaller Manufacturers," C. J. Alfred; "Ice Cream and the Farmer," Professor H. E. Van Norman; "The Development of the Ice Cream Industry," State Food Commissioner James Foust; "How Can the Cream Supply Be Increased?" Professor Larson; "The Economical Factory," Karl Wagemann; "Governing the Bacterial Contents of Ice Cream," Professor Gordon; "The Homogenizer, Its Uses and Abuses," John A. Amacker; a talk on the chemistry of ices by Professor F. T. Aschman. We quote from the address of Commissioner Foust:

I am one of those hard-headed men who believe that the banner of progress is carried by many groups of men in this great land who are not enrolled as such in any single one of those great political armies that are now battling for the exclusive right to march under that beautiful banner. I am convinced that the ice cream makers of America must have had their eyes fixed upon and their feet hastening after this banner. For I recently read somewhere, that you have increased the manufacture and sale of ice cream in America from fifty-five million gallons in 1906, to one hundred twenty million gallons in 1911; that is, you have more than doubled the volume of your business during a brief period in which the population increased only five or six per cent. What was once a rare delicacy has, through your enterprise, become an everyday dainty. The people wanted it, or you couldn't have found a market; but you made it possible for the people easily to get what they wanted; and I imagine that they have not yet had all they desire.

This great volume of new business has been done only by the turning into a new channel of tremendous quantities of raw material, once used for other purposes. The past six years have not witnessed such an increase in milk production as would be needful to supply the cream for your product and, at the same time, to furnish the material required by the increasing demand for milk for household use and for making butter and cheese.

I want to make this statement emphatic. On January 1st, of this year, Pennsylvania had exactly as many thousand dairy cows as she had in 1899; yet Pennsylvania's population has increased by more than one-sixth; your ice cream product has more than doubled, if you have kept pace with the rest of the United States, and the cheese consumption also has greatly increased. No doubt the efforts toward the improvement of dairy stock has somewhat increased the average yield per cow, but the gain in supply has certainly not kept pace with the increase in demand.

You are vitally interested in this matter. It lies at the foundation of the business you have so vigorously built up. I want, therefore, to say to you that your interests are closely linked with those of the dairy farmer, and that it will be good business for you to join your efforts with his in seeking the way out of the corner into which he is getting penned up.

He is confronted by increased cost of feed, higher wages demanded by labor that is yearly more difficult to hire, increased regulation for the protection of the public health. The State, through various agencies, is trying to help him meet his new problems, because his industry is essential to the highest fertility of the land and affects the food supply of the entire people. Your fortune, as much as his, rests upon the success of the work done by the State Department of Agriculture, the State Agricultural Experiment Station, and the School of Agriculture of the State College for the improvement of the dairy industry, and these State agencies for the dairyman's welfare should have your close interest and live support in every move they make to improve the basic dairy industry.

Every gain he makes in the feed grown per acre helps you. Every improvement in the quality of his herd, helps you. Every sacrifice he makes of his convenience under regulations for the protection of the public health, is for others more than for himself. Encourage him and those who are trying to help him to improve his methods. See to it that he is not a loser, out of proportion to all others, when he sacrifices his cows condemned by the tuberculin test.

One result of the decrease in milk supply has been the tendency to cut down the fat richness of your product and to use other materials for its manufacture.

The wares sold as ice cream and under other, similar names show a much greater variety of ingredients than was known a quarter of a century ago. The results are so various that many thoughtful buyers are coming to believe that there should be differences in name for these distinct products.

An example of the possibilities came under my observation a few years ago, when I was invited to share a banquet in which nearly every article was in part composed of a cottonseed product. In the list of such foods was a so-called ice cream whose fat was wholly supplied by cottonseed oil. You know, even better than I do, how much easier it has become to introduce such fats in place of butter fat, since the advent of the homogenizer.

It is not, however, chiefly to the question of composition that I wish to direct your attention at this time, but to that of sanitary production.

Ice cream is regarded by the consumer as a dainty, and it should be in all respects what that name indicates—made from clean, sound materials, in a clean, sweet factory, with bright, sweet utensils and machinery, packed in thoroughly cleansed containers, and kept, shipped and handled in such manner as to exclude all contamination. I am confident that most of you agree with me in this, and that you are doing your best to live up to this ideal. But, as also you know, there are many in the trade who have no such ideal, who have no regard for the health and taste of the buyer, or are utterly ignorant upon the subject. Any example of this kind simply raises queer questions about all factory ice cream, and causes a flattening of public desire.

I want to get at the men who make ice cream in dirty cellars and back shops; who make "snow balls" and the like from skim-milk that was never protected from flies; who vend with filthy hands, street-dust-peppered hokey-pokey to our children at the school-house and on the street corners; who repack the leavings of the circus booth and the festival stand; and who employ factory men and salesmen affected with loathsome and contagious diseases, or who expose their materials to disease contamination.

To stop these abuses, I believe that clean cut sanitary regulations vigorously enforced will be necessary. With such enforcement, I believe we can cut off, in great measure, these bad practices, and compel these street vendors to keep themselves and their wares clean, and either to make their ice cream in a clean way or buy it from those who do.

I state the problem to you with what I believe to be the best way of dealing with it, and I desire that you give it your careful consideration and suggestion.

The National Dairy Show.

The success of the National Dairy Show, held in the International Amphitheatre, Chicago, from October 24th to November 2d, was due in large part to the vigor with which it was advertised among dairymen and the public generally. It was the center of much interest and a number of organizations held their annual conventions in connection with it. Notable among these was the National Dairy Union, which met in the rooms of the Saddle and Sirlain Club. A general discussion of the dairy situation was had, after which resolutions of sympathy to the family of George M. Whitaker, late secretary of the organization, and to President Flanders because of the death of his brother, which occurred the day of his arrival in Chicago to attend this meeting, were offered and passed unanimously. The old board of directors was elected for the ensuing year. They are W. D. Hoard, George L. Flanders, J. A. Walker, James Foust and S. B. Shilling. After the election the meeting adjourned to meet again subject to the call of the president.

The American Association of Creamery Butter Manufacturers held its fifth annual convention and banquet at the Congress Hotel Wednesday, October 30th. A number of men of prominence as dairy educators gave addresses at the convention and the discussions of the subjects were interesting. The banquet Wednesday evening, given in the gold room of the Congress, was a splendid affair from every standpoint. About 300 attended.

B. H. Rawl, chief of the dairy division, Department of Agriculture, spoke on "dairy production."

His address was an appeal to the big creamerymen to assist the farmers to get capital needed to extend their dairy activities and thereby increase production. He stated that the banks operating short-time loans were not providing a service that encourages the farmers to branch out; and he believed the great dairy manufacturing interests could provide the aid needed. Speaking of development along production lines he said that with proper encouragement he did not regard the 1,000 cow dairy as improbable.

Dr. Russell, University of Wisconsin, spoke on "Transmission of Disease by Food Products." He mentioned typhoid fever as the most readily transmissible disease and milk as a most favorable agent.

In the butter scoring contests of the dairy show entries came from nineteen states and included Vermont on the east, Texas on the south and Colorado as the most western state. The state of Virginia, that a year ago made its appearance as a creamery butter state, had four entries, Minnesota had the most entries and Wisconsin next, the states having 43 and 38 respectively. A. L. Radke, of Plato, Minnesota, with a score of 97½, is the highest in the contest, and S. Nelson, of New Prague, Minnesota, score 97, is second. Only three of the Minnesota entries were under 90 and only one Wisconsin. Iowa had twenty-four entries and only one was under 90, while Illinois had twelve entries and all 90 or better.

Michigan Land and Apple Show.

The second Michigan Land and Apple Show is on at Grand Rapids, in the Coliseum. No city is complete without a coliseum for show purposes, and so Grand Rapids has one. The Michigan Land and Apple show is to boost Michigan fruit land and fruits, but entries have been opened to everyone. Various western railroads have placed exhibits designed to advertise the possibilities of the western country, and such exhibits have been welcomed but not unnecessarily encouraged. Referring to this phase of the show, the Grand Rapids Fruit Belt says: "The competition of the western countries is not feared if the growers of Michigan will come to the front and do their best. On the contrary, such competition will be helpful, as it will show the Michigan grower just how he has lost the most profitable fruit market in the world by not keeping up with or a little ahead of the procession in grading, sorting, packing and marketing his fruit."

Carroll F. Sweet is President of the Michigan Land and Apple Show Association, and M. C. Huggett is Secretary.

Association of Feed Control Officials.

Secretary J. D. Turner of the Association of Feed Control Officials of the United States, has finally completed the program for the fourth annual meeting of that organization to be held at the Raleigh Hotel, Washington, D. C., Nov. 18th and 19th. The complete program is as follows:

First Day—Morning Session.—Convention called to order by the President of the Association, at 10 A. M.
Roll call by states.
Annual report of the Secretary.
President's annual address.
Special reports.
Treasurer's report.

Appointment of committees—(a) Nominations; (b) Resolutions; (c) Treasurer's report; (d) Special committees.

Report of Executive Committee.

Unfinished and new business.

Afternoon Session.—Address—"Cottonseed Meals and Their Manufacture"—Dr. R. E. Stallings, State Chemist, Atlanta, Georgia.

Address—"Gluten Feeds and Their Manufacture"—Dr. H. C. Humphrey, chemist, Corn Products Refining Co., New York.

Address—"Oat By-Products, Their Value and Conservation"—Prof. F. D. Fuller, chief deputy state chemist of Indiana, Lafayette, Ind.

Address—"Utilization of By-Products"—Dr. Carl C. Miner, chemist, Miner Laboratories, Chicago, Ill.

Address—"State Legislation Affecting Commercial Feeding Stuffs"—Hon. George L. Flanders, Counsel, New York State Department of Agriculture, Albany, N. Y.

Discussion of the above addresses.

Second Day—Round Table Talk.

Miscellaneous business.

Reports of committees.

Election of officers.

Each session will be open to the public except the round table, which will be open to members only.

Ham and Bacon Show in Missouri.

Interest is growing in the first Missouri "ham and bacon show" to be held in Columbia under the auspices of the State Board of Agriculture, January 13th to 17th, during "Farmers' Week." Prizes of \$100 are offered, and any Missouri farmer is eligible to enter his home-cured bacon and ham.

No entry fees are charged and meat cured by any home process may be entered. No one farmer can enter more than one ham and one piece of bacon. The high price of meat may be responsible for this statement in the official bulletin: "Due care will be exercised to prevent loss of meat or damage to same, but the board will not be responsible should any occur; the judges have the right if necessary, to cut any piece of meat in order to determine its quality."

The judges of the show will be Mrs. Champ Clark, Prof. P. F. Trowbridge and a Missouri farmer to be selected later. The judges will have no way of knowing whose meat is inspected, as all exhibits will be numbered, and the names of the owners will not be known to the judges until awards are made.

National Federation of Retail Merchants.

The first annual convention of the National Federation Retail Merchants will be held at the Planters' hotel, St. Louis, November 19th, 20th and 21st.

The meeting will not be confined to retailers only who represent various retail associations of the country, but will include those who are particularly interested in and dependent upon the retail trade.

This will include retail associations of every class, including local, state and national, and the representation will not be limited.

New York Dairymen.

The New York State Dairymen's Association will hold its annual meeting in the Armory in Syracuse from December 10th to 13th. The sessions will be held on the lower floor while the exhibit of dairy and farm machinery and supplies will be in the main hall. W. E. Griffiths, the secretary, says the program will completely cover every phase of the industry and will be the most elaborate of any in recent years. A large attendance is expected.

New Conditions in the Bureau of Chemistry

By Our Staff Correspondent.

Washington, November 10, 1912.

Carl Lucas Alsberg, the prospective chief of the Bureau of Chemistry, is a second generation German, a class the members of which have done so much for the development of the United States and to increase the respect in which other Americans held the sturdy and efficient immigrants from the German states. He was born in New York a little more than thirty-five years ago. In that city he received the broad foundation for a magnificent education—an education that makes him one of the most distinguished men in the service of the government, even without taking into account manifold achievements.

There are men competent to judge who count him among the foremost chemists of the country at least, if not in the world. He stands well with the chemical societies of the country and the world, which is something that cannot truthfully be said about some of the chemists and some of the near-chemists who have been quoted in the controversies that finally led to the investigation of Dr. Wiley's administration of the bureau of which Alsberg is to be the head.

Degrees do not make a man, but if they were conferred by such an educational institution as Columbia, who gave Alsberg his *artis magister*, and the College of Physicians and Surgeons of New York, which made him a doctor of medicine, they mean that he had to have a standing in studies attained only by hard work. Add to these additional training in chemistry and physiological chemistry in German universities and their possessor, while head of the Bureau of Chemistry, is not likely to be afraid to go upon the witness stand and qualify as an expert in chemistry, physiological chemistry, pharmacology or just plain medicine. In other words, while Alsberg is head of the Bureau of Chemistry another fiasco such as the Government's case in the Coca-Cola prosecution is unthinkable.

In the first place, he would not hold that a drug or chemical is deleterious until after he has made investigations that would be convincing to a reasonable man that they really were what they purported to be. He would be too much of a man to try to "put over" anything simply to back up a lot of foolish talk, vented to advertise himself, even if he could be persuaded to try to advertise himself.

Alsberg's appointment makes it next to impossible to describe what manner of man he will be in the office except by referring to what his predecessor was not. It is so natural to say he will not do certain things done by his predecessor. It may not be quite so complimentary to him, but it conveys the idea one has in his mind, more forcibly than to say he is probably the ablest man that has been in the government service. But there are things that can be said about him without once referring to his predecessor.

For instance, it must mean something when it is stated as a fact, for it is a fact, that he was head of the department of biological chemistry at Harvard Medical School from 1906 to 1908 (during which time he was also chemical investigator for the United States Bureau of Fisheries as to the value of sea foods); that he is a member of the council of the Boston Society of Medical Sciences and was secretary of it; that he is the councillor of the American Chemical Society for the Washington section; chairman of the section of Biological Chemistry of the American Chemical Society; associate editor of *Chemical Abstracts*; collaborator on the *Journal of Pharmacology and Experimental Therapeutics* and the author of a long list of scientific papers in both English and German.

At present he is the chemical biologist in charge of poisonous plants laboratory, in the Bureau of Plant Industry. That does not mean so very much perhaps, but perhaps the list of those who endorsed and asked President Taft and Secretary Wilson to make him head of the Bureau of Chemistry, would have weight even with those who know nothing of chemistry but do know that a query as to whether there should or should not be a prosecution on a given state of facts, is purely a law question, or if not of law, then of policy, with which a chemist, even the head of the Bureau of Chemistry, can have nothing to do, unless his superior, the Secretary of Agriculture, invites him to express an opinion. The following are among those who endorsed him:

Dr. M. A. Rosanoff, Clark University, Worcester, Mass.;

Prof. Lyman Brumlaugh Starkey, Professor of Physiology, University of Southern California; Director Arthur B. Lamb, Havemeyer Chemical Laboratory, New York University; Col. John Bogart, Consulting Engineer, New York City; Dr. David Starr Jordan, President, Leland Stanford Junior University; George L. Struter, Professor of Anatomy, University of Michigan; Albert M. Barrett, Professor of Mental and Nervous Diseases in the University of Michigan, and Director of the State Psychopathic Hospital; William H. Nichols, President, Eighth International Congress of Applied Chemistry; Marston Taylor Bogert, President, Section IV, Organic Chemistry, Eighth International Congress of Applied Chemistry; Wilder D. Bancroft, President, Section IX, Photo-chemistry, Eighth International Congress of Applied Chemistry; Erwin F. Smith, in Charge, Laboratory of Plant Pathology, Bureau of Plant Industry, Department of Agriculture; P. A. Levene, Member of the Rockefeller Institute of Medical Research, Chief of the Department of Chemistry; S. F. Acres, Associate Professor of Chemistry, Johns Hopkins University; Edwin R. Seligman, Columbia University; Herman M. Adler, Pathologist at the Danvers State Hospital, Haverhill, Mass.; Felix Adler, Leader, Society for Ethical Culture of New York; Edwin G. Conklin, Professor of Biology, Princeton University; Geo. A. Hulett, Professor of Physical Chemistry, Princeton University.

The election of Governor Wilson, although foreshadowed with all the distinctness imaginable, puts the administration of the foods and drugs and the meat inspection acts on an uncertain foundation from now until the end of the Taft regime. That is true because this is the first time since the remedial statutes have been on the books that there has been a great political change. As Secretary Wilson once remarked, the Department of Agriculture, when he came into office, consisted of a few roll top desks and a dozen or two half-starved scientists. For all practical purposes, he created the department. He has made it an instrument that more intimately touches the whole people than anything except the postal system.

That the two laws before referred to are socialistic in the true sense of that word, goes without saying. That the Democratic party, in its essential principles, is individualistic, also goes without saying. Who knows what will be the attitude of the incoming administration toward them? It is pure supposition that because the party has declared for a union and strengthening of all governmental agencies relating to pure food, quarantine, vital statistics and human health, that the new secretary will undertake to follow the policies made by his predecessor in office.

It is conceivable, though hardly probable, that he will lend his car to Dr. Wiley to such an extent that the doctor's peculiar views as to how the food and drugs act shall be enforced, will become those of the administration. If a lawyer with a keen mind is placed at the head of the department, such, for instance, as Albert S. Burleson of Texas, the grotesqueness of the Wiley proposition that an accused or suspected manufacturer shall prove his innocence will be obvious.

There is only one reason for believing that the Wilson policies may be continued and that is that while the Democratic members of the House shed oratorical tears for Dr. Wiley, they always gave Secretary Wilson all he asked for in the way of money to carry on his work and many times they added something to his estimates so that he might extend his operations in a way to benefit their constituents. He was always in good repute with southern members because of his work for tick eradication and the development of varieties of cotton that would get the boll formed prior to the development of the weevil.

It is one thing for an insubordinate bureau chief to get tears of that kind but quite another, when there has been a change in the administration, for such a chief to impress his views upon the men who shed the tears. Dr. Wiley will probably learn the truth of that observation before he is five months older. He may learn that not only are republics ungrateful, but that there is a difference between Democrats in executive office and those not charged with any responsibilities of that kind. Even the righteous Moss, who worked manfully for the advancement of the interests that made war

on Wilson because he would not allow the food and drugs act to be used for the bedevilment of business rivals, may learn something of that kind.

A complaining Republican furnishing material for Democrats is one thing but an out-of-office Republican who thinks he can lead Democrats who are in office generally has a violent bump coming to him. Human nature would cease to be human nature were the Democrats to allow the displaced Wiley organization to dictate its policies. The Democrats, of course, welcomed the help of the doctor. They may even feel kindly toward the leaders of the Progressive party who made Dr. Wilson's election sure. Yet that is no warrant for believing President Wilson will maintain a private wire to Oyster Bay so that he may have advice without depending on the slow mails.

In view of the uncertainty as to whether they will even be left in their places, it is not natural to expect those in charge of the enforcement of the food and drugs act to undertake anything other than the prosecution of cases in which there can be no question either as to the sufficiency of the testimony or as to the construction of the statute.

In England a change in parties means a reversal of nearly everything other than the foreign policy. If the British system were in vogue here, the administration of the food and drugs act would hereafter have to be conducted according to the Wiley idea. There is this to be remembered, however, that British elections take place on questions of legislative and not administrative policies; not on what construction should be placed on a statute but on what statutes should be enacted.

It is only in this country that there are issues based on difference of opinion as to what an act of Congress means. If the fight made against the Roosevelt, Taft and Wilson construction of the food and drugs act were to be decided in accordance with the verdict at the polls the Roosevelt construction that whiskey and neutral spirits are not like substances would have to be set aside because Roosevelt was defeated. The Taft decision that they are like substances would also have to be set aside because Taft was defeated.

Application of the principles of the initiative and referendum (and we must contemplate this possibility in view of the popularity of their proposals) might require that the question whether they are or are not like substances be submitted to a vote of the people. Of course it might be a little expensive to conduct a national-wide campaign on the subject, but if the lives of helpless babes and defenseless women are being sacrificed because Roosevelt said they are not or because Taft said they are, then the expense should be borne cheerfully. By the same token the question whether benzoate is or is not a deleterious substance or whether it hides defects or makes possible the use of rotten tomatoes in much greater degree than through the use of strong vinegar or cinnamic acid should also be submitted in the same way.

Also by the same sign the people ought to be called on to decide whether the syrupy stuff made from corn should be called corn syrup or glucose. Inasmuch as the chief makers of corn syrup are men closely affiliated in business with the rich men of the Standard Oil Company, a campaign on that issue ought to be extremely profitable—for the right people. Inasmuch as the chief refiner of cane sugar is a trust within the ordinary meaning of the word and it might sell a few pounds more of cane sugar than it does if the manufacture of corn sugar were forbidden in the name of public health, it is fair to say such a campaign might have good results—for the right people.

It is possible that the Democrats who come into office have never cut their eye teeth, or that they have never been out later than nine o'clock at night, and that therefore it will be possible to make them believe all the moonshine that has been written and spoken in behalf of weak women and defenseless babes, but the chances are all against their being such unsophisticated innocents. The fact of the matter is that they were glad to use the material furnished by the insubordinate Wiley cabal but that is probably where they will stop. It helped them upset the people who have been in power for sixteen years, the people who enacted the statutes that made the bureau chiefs and their assistants of importance in the Department of Agriculture, but the Democrats, it is expected, will make their own policies with regard to those matters which enabled Dr. Wiley to cash in so handsomely on account of the work he did for the women and children, and, quite incidentally, for rich and powerful interests who have goods made in a certain way, to sell to the women and children that survived the snares set for their lives by the regime that will go out of office on March 4th next.

BOOK REVIEW

Dunn's Pure Food and Drug Legal Manual. Edited by Charles Wesley Dunn of the New York bar.

So much of importance attaches to a knowledge of the law governing his occupation by the producer and purveyor of foods that a work such as this is doubly welcome. Since the passage of the Federal food and drugs act of 1906, more prosecutions have been inaugurated under it than under any other act of Congress except the interstate commerce act. It behooves the handler of foods to know whether he violates the law in the conduct of his business, and this Manual forms as near an approach to a complete and conscientious guide as one may find. Its purpose, as set out by the compiler, is to make available complete, uniform and accurate information regarding Federal and state laws, and to make this information immediately available, of ready access, by a logical and practical arrangement, and this has really been accomplished.

In treating his subject Mr. Dunn has made the necessary distinction between the general laws on the one hand, and the special laws on the other hand. Volume I, just published, and numbering over 2,400 pages, contains all the general food and drug laws, Federal and state, rules and regulations, decisions—in short, everything relating to these laws which the reader should know. The general provisions are uniformly analyzed and classified, so that as a result all the requirements relating to any one topic—as, for example, relating to the use of preservatives, artificial sweeteners, and chemicals generally in food—are grouped, and the variation of the Federal and state requirements is pointed out.

Volume II, very shortly to be published, contains the special laws, regulations and standards regarding specific products, as, for example, oleomargarine, sausage, lard, etc. Volume I, because of the uniform arrangement, is self-indexing and complete in itself. Volume II contains the general index. Quarterly amendatory sheets for the year will be issued to subscribers by the publishers, without extra charge, so keeping the Manual up to date.

(Dunn's Pure Food and Drug Legal Manual Corporation, New York; 2,500 pages; buckram. \$12 net.)

APPEAL FROM COPPER SULPHATE ORDER.

The legal representatives of Park & Tilford, Acker, Merrill & Condit, Francis H. Leggett, Mayer & Lange, R. C. Williams & Company, Manna, Azema & Farnam and a number of other New York importers, have asked Secretary of Agriculture Wilson for an extension of the time in which the food inspection decision on the use of copper sulphate in the greening of vegetables imported from European countries will be put into effect.

On a finding of the Referee Board of Consulting Scientific Experts it was declared that the use of copper sulphate in greening of foods is injurious to health, and the Board of Food and Drug Inspection issued an order, effective January 1st, 1913, forbidding the use of copper sulphate, which is a product used largely in the greening of peas. Attorney Francis E. Hamilton filed a brief with Secretary Wilson outlining the condition of the trade at present, and pointing out how injurious financially the order will be to the importers who have let large contracts for purchasing peas abroad. He said the trade has purchased and contracted for from seven to eight hundred thousand dollars' worth of green peas, which will nearly all be affected by the copper sulphate order. A large portion of these peas has already been paid for and the shipments are now coming in.

The New York merchants said that they do not desire that the effective date of the order against imported goods shall be postponed, as it is believed that about all of the contracts will be filed and shipments received in this country before January 1, but they do desire that that part of the order forbidding the shipments into interstate commerce of peas which contain copper sulphate after the first of the year shall be reconsidered. They suggest that if that part of the law relative to the interstate commerce be set aside for one year all of the present contracts can be fulfilled and the large stocks of peas now on hand and those being received from abroad under contracts made before anything was known of the order can be disposed of without undue injury to the merchants. If, however, the department is to forbid interstate commerce in this commodity on January 1st, the importers stand to lose their whole stock which is being imported. Secretary Wilson took the question under advisement and will render a decision later.

Food as a Factor in Social Economy

By F. I. Wilbur.

In the recent International Hygienic Congress held in Washington there were apparently no features more emphasized in the exhibits and discussion than the importance of preventive sanitation along all lines where the public health is threatened. The value of such preventive measures has already been demonstrated in the case of the dissemination and development of tuberculosis, typhoid, hookworm disease, the dust diseases of industrial life, the air pressure changes causing caisson disease, all of which are especially disastrous to children as well as to adult workers. The importance of preventive teaching and care of the young was also demonstrated by exhibits and discussions of (1) the prenatal care given to the child by care of its mother, (2) the attention being given to the proper feeding of infants and to the instruction given ignorant mothers regarding the care of the children in the periods of most rapid physical development which, if defective, may impair the child's efficiency in adult life, (3) the care and feeding of school children, (4) the medical inspection system in schools, and (5) the dental and oral hygiene service that in many places is given free to those children who cannot afford to pay for it, and (6) the instruction in eugenics which was one of the subjects most discussed in certain sections of the Congress.

An analysis of the preventive measures could not fail to show the ever-increasing value that is being given to the subject of the nutrition of both young and old, and to the importance of an adequate and proper food supply, which is the greatest preventive of all forms of physical degeneration.

There is an old saying "Tell me what you eat and I will tell you what you are," and we are daily finding the truth of it. Certain classes of food unquestionably affect the cheerfulness and general moral characteristics of child or adult, as well as his physical capacity for work or study. Just as the finest engine cannot run without a sufficient and proper supply of fuel, so the finest brain and body cannot long do effective work without a proper supply of food fuel, though it may do so for a time.

It is said that after the Spanish-American War the chief engineer of the Spanish flagship met the chief engineer of the American flagship, and in a friendly chat the American asked the Spaniard how it happened that with better and faster ships, the four Spanish ships that came out of Santiago harbor had not been able to make use of their speed and get away. To this question the Spanish engineer sadly responded to the effect that it was because of the inferior coal supply. The Americans had cut off all their coal supplies elsewhere and what they could get at Santiago was of such an inferior sort as to be nearly worthless in such an emergency. In his opinion the issue of the war was virtually decided when the coal supply of the Spanish ships was cut off some time before.

This story merely illustrates the fact shown in the exhibits that corporations nowadays, such as the big life insurance companies of New York and elsewhere, are finding it worth while to provide lunches for their employes in order to gain by the increased efficiency of the human machines on which their money-making processes depend.

The results of experiments in Europe and, to some extent, in this country, have demonstrated that the best fed children are as a rule capable of doing the best work, and that the giving of free or practically free, sensible lunches to school children results in increased efficiency in study and better behavior.

The proper feeding of infants produces stronger and better children and lowers the rate of infant mortality which has hitherto been distressingly high in this country.

Those who are contending with the problem of alcoholism among their employes find that proper food, warmth and sanitary surroundings will generally dispel the demoralizing craving for liquor that is usually merely an indication of malnutrition somewhere in the system.

Men realize that it is necessary to keep the animals who assist them in their work well fed, and it is rather surprising, therefore, that they have not earlier realized that the variable domestic conditions which obtain in the homes of their workmen often cause a man to set out for his day's work with

an inadequate supply of food fuel for the activities of the day. To ensure every workman at least one nutritious meal in the middle of the day is found to be a distinct economic advantage. It was long ago found in building railroads in England that men supplied with liberal amounts of oatmeal water to drink showed far more effective energy for work than those who were supplied with coffee to quench their thirst. In providing free lunches for school children or adults, the dynamic energies of different foodstuffs should therefore be taken into consideration. The food provided should not only be adequate in quantity, but in quality.

Occupations requiring a great expenditure of muscular energy would naturally require less energy-forming foods than those where mental accuracy of eye and hand in delicate details are required. The food provided for the lunch of the employes of an establishment should therefore be adapted to the nature of their work.

For centuries men have been accustomed to think of their fellow men, especially their employes, as psychological agents whose ability to work depended merely upon their will power, hence it is disconcerting to find that even the will power of individuals and their ordinary instinct of self-preservation can be lessened or paralyzed by an excess of carbon dioxide in the blood. Since poor ventilation or excessive labor with insufficient rest periods, and insufficient food can cause such an accumulation of carbon dioxide in the blood the exhibits and discussions showed that employers are at last realizing the importance of good air, wholesome surroundings, frequent rest intervals, and sufficient and proper food as economic necessities for the efficiency of the work and the standard of the workmanship.

The improved facilities for ventilation and rest periods of the employes is being more and more attended to, and the provisions made for the care or pensioning of old employes in some establishments is also tending to lessen the fear of poverty in old age which is the nightmare of many a poor workman or workingwoman.

It is quite possible that in the reaction from the consideration of man as a purely psychic being, we shall over-emphasize the importance of certain physical conditions, but the light of the knowledge of the hygienic conditions of today clearly indicates that from infancy to old age the question of hygiene and even morality is to a large extent dependent upon the food supply. The study of foods and their nutritional effects in relation to various forms of muscular, mental or physical activities seems a science full of possibilities for the future benefit of the race. Deprivation of proper food leads to anarchy, murder and crimes of lawlessness and violence. What we already know plainly shows that, just as the proper feeding of the masses is of economic importance, so the speculation in foodstuffs, or unfair methods of increasing the price of living, as well as the adulteration of foods is a crime not only against the individuals of the nation but is a distinct menace to the public peace and welfare.

A HOME MAKERS' EXHIBIT.

A Home Makers' Exhibit and Conference under the auspices of the School of Domestic Arts and Sciences of Chicago will be held at the First Regiment Armory, Chicago, beginning November 18th and continuing one week. Its purpose is to promote pure food, honest fabrics and better appliances. The pure food propaganda will be materially assisted by an exhibit of the Illinois Food Commission, in charge of officials and chemists of the commission. Every effort to enlighten the public on the subject will be made, and incidentally the work of the commission in safeguarding the food supply of the state will be explained and illustrated. The announcements of the exhibit declare that it will be a home makers' exhibit "by home makers, for home makers, with home makers." Much stress is laid on the necessity for improvement in domestic methods in diet, hygiene and the general reduction of labor effort by the employment of improved equipment. Mrs. Claudia O. Murphy will direct the exhibit and conference.

"Healths best way;
Eat apples every day."

Survey of the Food and Drug World

New York Grape Crop Short.

The New York grape crop for 1912 will amount to less in both quantity and value than that of 1911. According to shipping and market records kept by G. G. Lansing of the Niagara Grape Company the total production for last year was 12,700 cars. Of this 8,700 cars were shipped from the Chautauqua district, which is the great Concord grape territory; 2,500 cars from the Kuka Lake section, and 1,500 from all other sections of the state. The money value of that crop to growers, at the very conservative average of \$25 per ton, was approximately \$4,000,000. For 1912 the output from the Chautauqua district is now estimated at 5,000 cars, or 3,700 less than last year. Niagara grapes from the "bagging" district are reported to be of unusually fine quality and delicacy this season. These are grapes that are ripened in paper bags. Early in July, when the clusters appear, they are enclosed in the bags and are subsequently gathered and marketed in that form. The cost of production by this process is about double that of the ordinary method. While the grower is not certain of getting more than 50 per cent more for this product than for general stock, he is always sure of a solid market for it, and retailers to the trade that demands these grapes sell them at from 100 to 200 per cent more than can be commanded by the ordinary product. They will soon be on the market in carefully packed baskets covered with wax paper. From 1,000 to 1,200 tons of the Chautauqua product are annually made into unfermented grape juice and about 600 tons into wine.

Improving New York's Milk Supply.

Proprietors and managers of nearly two hundred public eating places have joined the New York Milk Committee in its fight to improve the quality of milk dispensed in hotels, restaurants and lunch rooms in New York City. A general committee of twenty-five members has been formed, and steps have been taken to arrange an active campaign. An executive committee of seven members was appointed to have charge of the routine work involved in the study of conditions of production, transportation, grading and supervision. This will enable proprietors of public eating places to get exact information to help them in making contracts for the milk supply, and they will be able to exercise an independent laboratory control over it. This, with information which may be obtained from the Health Department, will make it possible, it is said, to insure a pure and wholesome quality of milk.

Government to Study Sugar Growing.

Announcement is made of the establishment at the South Texas Gardens at Fort Brown, Brownsville, of the first sugar cane station of any importance to be started by the Government. The Department of Agriculture has decided to divert the funds heretofore going to the maintenance of a propagating plant to the study of the sugar cane, a work of inestimable value to the sugar growers of the Lower Rio Grande Valley and the state at large, and a recognition by the Government of the importance as a sugar producing section of this valley. The last Congress made an appropriation for sugar cane investigations and this work will be carried on at Brownsville. The purpose of the plant will be to work on all the principal economic problems of Rio Grande cane growers, especially the discovery and introduction of better varieties of cane, in the hope of finding some that will ripen early and have a higher sugar content, also to test improved methods of cultivation and irrigation, to continue the study of insect enemies and if possible to prevent the introduction of plant diseases which attack the cane elsewhere.

Wrongly Exaggerating Oyster Dangers.

The popular tendency to exaggeration is illustrated in the case of the recent attacks on the wholesomeness of oysters, says *Leslie's Weekly*. There have been some instances in the past fifteen years in which illness was ascribed to eating oysters, but in most of these, where circumstances permitted a thorough investigation, it was found that the accusations against the oyster originated in the imagination, and, in one or two cases at least, to a desire to attract public attention on the part of persons who placed the matter in print. The real

facts concerning oysters are that a large proportion of the foods and drinks of which we partake every day are more likely to be unwholesome than oysters, because oysters are now principally grown in the deep, pure waters of the large bays and sounds, where they are continually swept by the clean, salt water currents. These grounds are miles from land and are remote from all sources of contamination. Not one bushel of oysters in one thousand has any chance to become contaminated.

Eggs Will Be Higher in Price.

Here are some of the reasons advanced by N. E. Chapman, poultry expert of the extension division of the University of Minnesota farm, for the prediction that eggs will be much higher in price:

Increased consumption due to a higher quality of eggs produced by educational campaign of the extension department and shippers.

Increased demand for outside consumption, creating heavy exports.

General advance of all food products, especially meats and the increased use of eggs as a substitute.

Elimination of eggs of lower quality and marketing of produce up to a given standard.

Shorter summer period in which eggs fell to low prices, affecting the general average for the year.

Mr. Chapman believes that eggs will reach fifty cents per dozen in the cities the coming winter.

Government Dairy Division Opens New Branch Office.

In extension of the Government's work for the development of the dairy industry in the far West, the Dairy Division of the Bureau of Animal Industry, United States Department of Agriculture, has opened a branch office at Salt Lake City, Utah, in the McIntyre Building. Mr. A. K. Risser, who was at one time in charge of similar work in the Southern states, will be in charge, and will have the assistance of Mr. F. H. Bothell, expert in market milk inspection, and Mr. G. M. Lambert, expert in creamery management. In addition to these there are now two Dairy Division men working in Idaho in coöperation with the State University, two in North Dakota in coöperation with the State Dairy Commissioner, one in Colorado in coöperation with the Agricultural College, and one man has been assigned to Utah to begin work there at once in coöperation with the Agricultural College. All of these men will be directed from the Salt Lake City office.

Meat Riots in Berlin.

The last few days of October saw meat riots in the streets of Berlin. The government attempted to have the butchers place on sale imported meats from which the duty had been removed, but the butchers refused to handle the meat, exposing only native products and the prevailing high prices. On October 24th 2,000 women raided a butcher shop in the Wedding district, demolished the premises and stole the meat. The manager was seriously injured. All the other butcher shops in the district were closed and barricaded. The police were out in strong force, as the district, which is in the north of Berlin, has on previous occasions been the scene of violent disturbances.

Cocoa, Coffee, and Tea Imports.

Imports of cocoa into the United States in the year which ends with next month will exceed those of any earlier year and approximate 150 million pounds, against 57 million pounds ten years ago. The growth in the importation of this article in recent years has been much more rapid than that of tea or coffee. The quantity of cocoa, or cacao, imported in 1912 is practically three times as great as in 1902, a decade earlier, while tea imports show an increase of but 20 per cent and those of coffee are actually less than in 1902, the comparisons being for the nine months ending with September of the years named.

Care in Meat Inspection.

A recent circular of the Bureau of Animal Industry covering the installation of inspection rooms in new slaughtering plants, shows how carefully plans for inspection are made. The circular says: "When plans of proposed retaining rooms

or places for final inspection or plans for new abattoirs are forwarded to the bureau for approval, it is requested that the plans be accompanied by full information in regard to the positions assigned to inspectors for examination of the cervical glands and of the viscera. The information should also include the approximate distance from the scraping bench to the retaining room or place for final inspection, height of rail from the floor, the locations of the various workers on the dressing rail, washers, sprinklers, floor troughs, etc.; also the route by which condemned material is conveyed from the place of final inspection to the inedible tank house."

And Denmark Is the Home of Eutter.

Denmark's production of margarine by the twenty-seven margarine factories was 78,043,630 pounds last year, while importations were 3,306,930 pounds more than exportations, so that total consumption was 81,350,560 pounds, or 29.32 pounds per capita. The Danish production and consumption of margarine have both been increasing during the last few years. A remarkable change in the use of raw materials has taken place in the margarine industry. While, for instance, in 1908 about 70 per cent of the raw materials used in the manufacture of margarine in Denmark consisted of fatty substances of animals and 30 per cent of fatty substances of vegetables, the proportion is now the opposite, so that the fatty substances of vegetables used now amount to about 70 per cent. This change appears to be a result of the high prices of cattle of late years. Most of the raw materials are imported from abroad, especially those of animals, while considerable quantities of coco and sesame oils are pressed by the Danish mills.

No Aid for Tomato Blight This Year.

The Department of Agriculture has stated that no aid can be rendered in looking this year for the cause of the tomato blight which is reported to have worked havoc with the crops in Maryland and New Jersey. The widespread diseased condition of the tomato crop in the canning districts of Maryland, Delaware and Virginia was brought to the attention of the department by Frank E. Gorrell, secretary of the National Canners' Association, who asked if the department could not do something toward getting rid of this blight.

Philadelphia Food Men to Be Prosecuted.

Following in the wake of a rigid canvass of local establishments made by a corps of special agents, State Food Commissioner James Foust, during a recent visit to Philadelphia, ordered that wholesale arrests of local dealers be made because of violations of the pure food regulations. As a preliminary move warrants for men long prominent in the trade, who are charged with dealing in rotten eggs upon a tremendous scale, were at once sworn out.

Raising Peanuts in Washington.

Ranchers at Reardon, Washington, during this summer, experimented in growing peanuts, and their efforts met with a fair degree of success. Many of them, it is reported, are going into the business on an extensive scale next year. The soil in this region is said to be peculiarly adapted to the growth of these miniature tubers and it is believed they can be produced at considerable profit.

State Regulation of Cold Storage Urged.

State regulation of cold storage products has been recommended by the Milwaukee Common Council committee on legislation and the city attorney will be instructed to draft a bill for presentation to the legislature for the regulation of refrigerators. Alderman Coleman has a complete ordinance prepared for presentation to the council on city regulation of storage warehouses.

2,500 Tons of English Walnuts.

The crop of nuts known as English walnuts in southern California will be unusually large, amounting to about 12,500 tons. The price will be high for the reason that the French crop is only about half of the normal output. The value of the California nuts will come to about \$3,000,000. No other part of America produces these nuts.

Millions in California Citrus Crop.

California's 1912 orange crop will be worth \$58,000,000 and will require 55,000 railroad cars to move it. Railroad officers have made public these estimates. By "orange crop" the officials explained they meant to include lemons also. The lemons will require 7,000 cars.

THE DEFINITION OF BEER.

For nearly six years there has been more or less agitation of the question of what is beer under the National food law. The committees of so-called experts appointed by the then chief of the bureau of chemistry, Dr. Wiley, proposed tentative definitions and standards which were decidedly tentative, and the representatives of the brewing industry proposed practical standards which were promptly rejected.

All this time the *American Brewers' Review* maintained that the Government had no right under the law to establish food standards and that all this fuss and feathers was for nothing.

Now, at last, comes a report that Secretary Wilson takes the position "that under the present law the food board has not the power to make standards of food and drugs," and that if the board is to have that power, further legislation by Congress is necessary.

All through the work of applying the food law to the trade the brewers have been led to give in on points where concessions were uncalled for, while on points plainly required by the law they were less particular. Thus, most brewers have added the word "style" or "type" after the character name of "Pilsener" or "Munchener" or similar name, for which there never was good reason in the law. But, on the other hand, designs and words on labels indicating that a beer was all malt have been used with less care, whereas it was plain from the start that these were the cases in which misbranding might be charged by the Government with some show of success. It has been a policy of yielding matters of some importance without much opposition while non-essentials were allowed to cause trouble.

Similar questions have been recently dealt with in Germany. A Berlin brewery called its beer "Pilsener," with the name of the brewery and place of production stated in close proximity to the title. A lower court held that this was improper as being an attempt to pass a Berlin product for a Pilsen product. But the supreme court of the empire takes the common sense view that a customer cannot be expected to believe that a beer was produced in two places, and the name and address of the brewery being plainly shown, there could be no attempt to mislead by creating the impression that the beer was made in Pilsen.

To state on the label the use of malt and hops, particularly if designs of barley and hops are shown, is to convey the impression that the beer is made of malt without adjuncts. If this is not the fact, it is, of course, misbranding under the law. On the other hand, to designate a beer as Pilsener, giving the name and place of the brewery, cannot be reasonably considered a misrepresentation.

It seems that for the present the brewing trade is not to be harassed any further by attempts to foist upon it unreasonable restrictions, and a compliance with the obvious provisions of the law is all that will be enforced. No brewer ought to have any difficulty on that score, as he has nothing to conceal and no reason to claim for his product any properties it does not possess.—*American Brewers' Review*.

A GREAT OBJECT LESSON.

Last year's International had on exhibition over 11,000 of the finest animals in the world, entered in competition for nearly 3,000 premiums, aggregating more than \$75,000, besides numerous beautiful and valuable trophies, medals, etc., offered in upward of 700 classes of cattle, horses, sheep and swine, not to mention the packing house and other interesting exhibits, all of which were viewed by more than 400,000 visitors from nearly every state in the Union and many foreign countries. This year's show (the thirteenth of the series) will be the most magnificent ever held. The entries are finer and more numerous, and the attendance bids fair to be by far the largest in the history of the enterprise.

In addition to the main exhibition of animals in all departments, and besides the absorbingly interesting judging ring scenes, intercollegiate stock judging contests, daily public sales of all breeds, and many other leading features, there are provided each year a new series of brilliant evening entertainments and horse fairs, with music, special amusement numbers, artistic evolutions and intricate driving and riding contests in the great arena, followed by a grand pageant composed of the leading prize winners of the day from both cattle and horse rings.

There are also held many animal conventions, meetings and discussions by breeders' and stockmen's associations, participated in by the foremost live stock representatives of the world, for consideration of practical questions of the highest moment to producers.

The Law and the Food Manufacturer

Potato Quarantine Upheld.

Judge Charles M. Hough of the United States District Court, has handed down a decision in the case of the seizure of 200 bags of German potatoes belonging to Meyer & Lange of New York, rendering the decree in favor of the Government, the libellant in the condemnation proceedings. The action was brought for the purpose of testing the validity of quarantine notice 3, prohibiting the entry of German potatoes, issued by the Secretary of Agriculture, under the authority of the new plant quarantine act. Francis E. Hamilton, attorney for the importers, contended that the secretary did not give the required "due notice to interested parties," and this provision not having been complied with, the quarantine notice was ineffective.

It is expected that the importers will take an appeal from Judge Hough's ruling to the United States Circuit Court of Appeals.

After giving a brief statement of facts in the case, Judge Hough, in his decision, says:

"In construing this act it is first to be remembered that 'Congress from the beginning has exercised plenary power in respect to the exclusion of merchandise brought from foreign countries' (*Butterfield vs. Stranahan*, 192 U. S., at 492) and might have forbidden German potatoes without any preliminaries whatever.

"The question whether any given article of import shall or shall not be excluded is not in its nature of judicial investigation—it is political—in a wide but entirely proper sense of the word.

"This being the case, and no provision being made in Section 7 of the statute for any judicial review of the acts of the secretary it follows that the Department of Agriculture is vested not only with power to exclude potatoes, but to decide what shall be 'due notice' and who are the 'interested parties' to be notified, as a preliminary to such exclusion. This does not mean that any executive officer can act arbitrarily or in bad faith; such malfeasance in office may render his act void because unlawful, but a very wide discretion is lawfully vested in him, for the use of which he is responsible to Congress alone, though he may so abuse it as to subject his acts to judicial review. This is believed to be the substance of the doctrine of the alien cases, of which the Japanese immigrant case 189 U. S., 86, and *Turner vs. Williams*, 194 U. S., 279, are perhaps the best known.

"If this view be taken of the agreed facts, what the secretary did falls far short of abuse of discretion. It is easy to point out that this or that additional effort might have been made, yet it was obviously impossible to reach every person who might thereafter be affected by the proposed exclusion of a common article of commerce, and since everyone was conclusively presumed to have knowledge of the law itself, it cannot be held unreasonable, and therefore an abuse of discretion to give notice by informing the public prints of proposed action that would affect their readers or some of them.

"If, however, this construction of the statute be too modern, no more stringent rule is or can be contended for than that the words 'due notice to interested parties' show an intent to secure to the owners of potentially excluded potatoes that kind of notice which is one of the necessary elements of 'due process of law.'

"To this contention two lines of decision furnish a reply. (1) the act of Congress passed in the exercise of its undoubted power is certainly to be viewed as favorably as are the statutes of a state, and the notice upheld in *Goodrich vs. Ferris* 214 U. S., 71, was far less efficacious than the one here complained of. (2) The object of the law is very important in determining its construction. This statute is intended to advance and maintain the health of plants themselves desirable if not indispensable for the health of man. Diseased potatoes obviously require at least as drastic measures for exclusion and destruction as do unlawful fish nets or inferior (though not unwholesome) tea (*Butterfield vs. Stranahan*, supra; *Lawton vs. Steele*, 152 U. S., 133), and compare the garbage cases (*California Reduction Co. vs. Sanitary, etc., Works*, 199 U. S., 306; *Gardner vs. Michigan*, idem, 325).

"To prevent the spread of potato disease in the United States is an exercise of police power under the constitutional grant of power over commerce, and it is of the most obvious

and laudable kind. Speed was necessary, and summary action justifiable. The words 'due notice' are to be interpreted in the light of these facts. In my judgment, more and longer notice was given than was necessary.

"Decree for libellant."

Oleo Law Upheld in New York.

A very important oleo decision was handed down by Justice Kellogg and associates of the Appellate Division of the New York Supreme Court, October 11th, in the case against John J. Guiton and Patrick C. Rilly.

The decision is sweeping and it has indirectly considerable bearing on the butter situation, as the justice holds, among other things, that oleomargarine is a good substitute for butter and that this should form no legal objection to its manufacture or sale.

He also holds that the state cannot interfere with the making of it, if it is sold for what it is. Yet the state can prevent the sale of oleo as butter and can regulate its sale as well as prevent deception.

The purpose of the oleo law, the court holds, is to make fraudulent substitution of oleo for butter impossible. It matters not whether oleo is colored by adding colors or made yellow by selecting ingredients which will produce a butter yellow.

As long as oleo can be produced either colored or uncolored, the court presumed the colored product is manufactured to pass as butter and to compete more directly with it than uncolored oleo.

The case was originally brought by the State Department of Agriculture and the lower court decided against the state. The appellate division reverses the original decision. The decision goes elaborately into the question of coloring oleo and sums up the matter by saying that there is no legitimate reason or excuse for the production of yellow oleo, except a desire to make it resemble butter.

In conclusion Justice Kellogg holds there is no good reason why manufacturers should not select yellow ingredients if it is not done for the purpose of making the produce more closely resemble butter.

Yet he believes it a fair inference that the yellow ingredients are used to make the production resemble butter, so as to easily deceive the public. The judges were divided three to two, and the attorneys for Guiton and Rilly announce that they will appeal the case.

Some months ago a case very similar to the preceding one was tried in Mankato, Minnesota, and the court decided against the state.

Value of Patented Package in Price Protection.

Injunction proceedings were brought in September against James H. Baxter, a grocer in Davison, Michigan, to prevent him from cutting the price on Kellogg's toasted corn flakes. The retailer had advertised to sell corn flakes at less than cost—four packages for a quarter. The sale was set for Saturday, September 14th. He refused to heed the remonstrances of the Kellogg representatives, whereupon suit in injunction was brought and the special sale stopped, at least so far as it related to the Kellogg product. The Kellogg package has a patented opening and closing feature, which was taken advantage of. Under the protection afforded by this patented feature the company has placed on the panel of the package the following announcement:

"This package is patented and is especially designed to preserve the contents in fresh condition until consumed. This package and its contents are sold conditionally by us with the distinct understanding, which understanding is a condition of the sale, that the package and contents shall not be retailed or advertised or offered for sale at less than 10 cents per package. Retailing the package at less than 10 cents per package is a violation of the conditions of sale, and is an infringement on our patent rights, and renders the vendor liable to prosecution as an infringer."

The temporary injunction, which was secured before Mr. Baxter's advertised "sale" could be held, was made permanent in a decree issued by Judge North of Calhoun County on October 30th. The court holds that the notice printed on the top of the Kellogg patented carton constitutes "a good and valid contract," which was violated by the defendant.

An Important Misbranding Case.

A jury in the United States District Court at San Francisco on September 24th rendered a verdict in the case of the D. Ghirardelli Company that will establish a precedent for which merchants and manufacturers all over the United States have been contending for—a business-like interpretation of the pure food and drugs act. The jury decided that the firm was not guilty of misbranding the article known as Ghirardelli's Italian Chocolate, especially as the name of the company and the words "San Francisco, California," appeared on the box. The indictment was presented on October 28, 1910, and charged the firm with having in the preceding year sold to Tillmann & Bendel of San Francisco the article in question, and that Tillmann & Bendel shipped the same to Edward J. Walsh at Carson, Nev., that being an interstate commerce shipment, and therefore under purview of the act. The prosecution contended that the label was intended to deceive the purchaser into the belief that the chocolates were manufactured in Italy. The counsel for the company contended that the word "Italian" on the label used in the manner in which it was used could be interpreted only as meaning a style of chocolate, and not the place of its manufacture. The jury was out only long enough to take a single ballot, and that was a complete exoneration of the firm. By this decision precedent is established for future cases of alleged misbranding of food.

What Will Happen in Texas.

Mr. Leopold Morris of Victoria, Texas, has recently been elected to a seat in the Texas Legislature. He has given out his plans to introduce food legislation as follows in the forthcoming session:

To prohibit the sale at soda fountains of all beverages which contain caffeine, except under a license, and to forbid their sale altogether to children or minors.

To prohibit the sale at drug stores of packages of medicines which contain a high percentage of alcohol in wet territory without a state license, and to limit their sale in dry territory.

To prohibit the use of benzoate of soda in food products.

To require all goods, other than food and drugs, to be labeled as to the quality or character of their materials and to bear the names and addresses of the manufacturers.

Ruling of Nebraska Commissioner on Cream Purchases.

The Nebraska pure food statute provides that testing of cream for commercial purposes "shall be done in accordance with the rules and regulations therefor prescribed by the commission" (Ann. St. 1911, Sec. 9838.)

The commissioner made a rule that payment for cream purchased for commercial purposes should not be made on the same day of the purchase. It was held (in State vs. Elam, Nebraska Supreme Court, 136 N. W. 59) that a defendant could not be punished criminally for a violation of this rule, the time and manner of payment having no connection with the testing of the cream.

Shipper of Misbranded Goods Need Not Be Given Hearing.

The United States Supreme Court holds (in U. S. vs. Morgan, 32 U. S. Sup. Ct. 81) that the notice and preliminary hearing by the Department of Agriculture which must be given under the food and drugs act of June 30, 1906, to the person from whom the sample was obtained, when, upon examination by the Bureau of Chemistry, an article is found to be adulterated or misbranded, is not a condition precedent to the prosecution of a manufacturer, instituted by the Department of Agriculture or its agent, for shipping misbranded goods in interstate commerce.

Exchange Loses Charter.

In a recent report from Kansas City, Missouri, it is stated that prosecution of the Kansas City fruit and produce exchange as a "food trust" ended on October 5th, when Judge Seahorn in the United States District Court assessed a fine of \$18,000 against the exchange and its sixteen members.

Later he reduced the fine to \$5,000 and granted an injunction restraining the exchange from meeting and fixing prices and ordering its charter forfeited. The defendants filed a motion for a new trial.

ARKANSAS CHANGES COMMISSIONERS.

John H. Page, the new Commissioner of Mines, Manufactures and Agriculture of Arkansas, the department that has charge of the enforcement of the state food and drug



CLAY SLOAN,
Retiring Arkansas Commissioner.

laws, took office on November 1st. He succeeds Clay Sloan, who has filled the office with credit to himself and with profit to his commonwealth.

NOTHING IS CHEMICALLY PURE.

It is refreshing to find that Judge Dodge of the United States District Court for Massachusetts, in deciding a recent case, declared that the pure food law, which he said was one of the most useful laws ever placed on the statute books, was "a law passed for practical purposes, to be considered by practical people, and not given an unduly theoretical construction."

The case involved the presence of talc in candy eggs, peaches and pears, of which the government seized 131 boxes. On the trial of the case it appeared that there was only a trace of mineral matter, alleged by at least one of the government chemists to be talc. No claim was made that the mineral matter was present in sufficient quantity to be harmful; simply that mineral matter was present. It was shown for the defense that there are no substances that are chemically pure; that every ingredient that went into the candy contains mineral matter—the gelatine, the chocolate and the sugar. Now the pure food law expressly says that candy is adulterated if it has talc in it. Nothing is said about quantity, and the government insisted its case was proved when it showed that the candy seized showed traces of talc.

But the judge instructed the jury in a way that brought in a verdict for the defendants. The judge said that as a general rule the law does not take account of things that are "entirely trifling, insignificant, unsubstantial, of no consequence for any practical purpose." He said that the quantity of mineral matter found in the candy was so small as not to be appreciable for any practical purpose. "A mere mechanical trace, only to be detected by a skillful chemist, so small that all the difference it could make for any purpose whatever would be only imaginary or theoretical," was not a violation of the law. In other words, the law does not expect the impossible. No substance is chemically pure; and so long as the manufacturer guards the purity of his product so far as he is able, adding nothing for the purpose of gain or to deceive, he has conformed to the spirit of the law.—*American Miller.*

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CHANGE IN SUBSCRIPTION PRICE EFFECTIVE JANUARY, 1913

From January 1, 1913, the subscription price of THE AMERICAN FOOD JOURNAL will be \$2.00 a year in the United States, \$2.50 in Canada, and \$2.50 in other countries in the Postal Union.

Subscription orders at the present price will be accepted, when accompanied by cash or check, up to December 30, 1912, for not more than one year.

Present subscribers can renew their subscriptions for one year at the present price, provided the renewal order reaches us before December 20, 1912.

After January 1, 1913, all subscriptions and renewals will be billed at the new price.

QUARANTINE ADVANTAGES.

There are several phases of the plant and fruit quarantines declared under the act of August 20, 1912, by Acting Secretary of Agriculture Willet M. Hays, and the opposition to them in certain quarters, that deserve more than passing attention. The language of the notices is the language of a statute. "It shall be unlawful," says Mr. Hays, to do certain things. The ordinary observer will jump at once to the conclusion that here is an unwarranted usurpation of power. But not so, holds Judge Hough. He declares that in establishing the quarantines the Acting Secretary of Agriculture was entirely within his rights and discretionary powers. There is a rule of law which says that the scope of a statute may not be extended beyond its terms by implication or otherwise, and concerning the action of the Acting Secretary of Agriculture there might be a criticism of the assumption of legislative powers, were it not for a principle frequently upheld in the United States courts, by which the police power of the executive is safeguarded. In a number of appeals from the Customs Court, established to pass upon customs rulings of the Secretary of the Treasury, it has been held, where the claim was made that the Secretary excluded the powers granted by the act in making rulings, that the action of the Secretary was within the police powers of the executive.

In other words, where an obvious need exists for action that is practically legislative, and where the statute does not cover the need, the President or a member of his Cabinet (whose powers are coördinate in his department with those of the President) may supply the deficiency. These powers seem to be practically without limit and their exercise has aroused frequently great antagonism, notably in the case last year when Postmaster General Hitchcock arbitrarily ruled that certain second-class publications should be transported by freight instead of in the usual mails. The courts held that under the act giving him the power to make rules and regulations, Mr. Hitchcock's ruling could not be overthrown or his authority in any way interfered with by the courts. The court practically disclaimed jurisdiction, and that is, in effect, the decree of Judge Hough in passing on the potato quarantine case recently brought before him and published in full in another part of this issue of the AMERICAN FOOD JOURNAL.

Another feature of the quarantine is that it affects potato imports from Germany. It is noteworthy that the Bureau of Plant Industry issued some months ago a bulletin in which certain potato diseases of foreign origin are described with great accuracy. Some of these diseases are familiar to American growers of potatoes, so that as a preventive measure against them the quarantine may be merely a locking of the stable after the horse is stolen. But it will have an impression on the German official mind. The Teutons, with much ingenuity, have made more of the potato than we have. In Germany it is not only eaten as we eat it, it is desiccated and stored for future reference in such a manner that it is entirely safe from decay. It goes into certain forms of glucose. In fact, nearly all glucose coming from Germany is made from potatoes. Potato starch is a great German product. By a process in which the potato undergoes treatment by sulphuric acid, a vegetable ivory is produced. In America these various uses for the potato, while known, are not put in effect. We either eat the tuber or store it in the natural state. When our own production is low, we take from foreign markets. Germany gets the advantage of this. But there is no reciprocal movement of American food products. Germany has barred our beef on the ground of its unwholesomeness. The agrarian party in that country is charged with responsibility for this state of facts, but the accounts of the recent riots in Berlin convince us that the responsibility rests elsewhere, in part at least. The butchers refused to handle foreign meat when given the opportunity. But the injustice of excluding our meats will be brought sharply home to the Kaiser's government when this quarantine against German potatoes is brought to its attention. No doubt the German ambassador will protest to the State Department that potato wart is not an exotic disease in America, and urge that a trade of considerable dimensions should not be overthrown on such a small basis for action. Then will be the time to spring the Bureau of Plant Industry's bulletin, showing how many diseases with distinctive symptoms this potato wart thing splits up into, and to hint in his ear that there might not be much that is desperately wrong in the condition of American beef if the matter were regarded in the proper light.

Some importers of citrus fruits in New York have suggested that the quarantine against Hawaiian fruits is a move in behalf of the California fruit growers

and a blow at their business. This is indignantly denied by the *California Fruit Grower*. The fact remains, however, that by the fruit quarantine a good many Hawaiian fruits that come into competition with California fruits are excluded from the United States. The position of the Department of Agriculture in establishing both quarantines seems to be both well founded in point of scientific accuracy and airtight from a legal standpoint.

THE SAFFRON STREAK.

It would have saved Dr. Wiley's friends much embarrassment if he had been frank enough to admit a long time ago a fact that he announces now without hesitancy and with some apparent satisfaction because of the way he has hoodwinked the public all these years. We refer to his recent admission that he is not and never has pretended to be an expert physiologist, toxicologist, pharmacologist, doctor of medicine or physiological chemist. This admission is printed in one of Dr. Wiley's personal organs, *Barrels and Bottles* of Indianapolis, and because it appears in that publication we think there need be no hesitancy in accepting it as the utterance of Dr. Wiley. In the statement attributed to him and reprinted in *Barrels and Bottles*, he says:

At the close of my series of addresses in my native state, Indiana, the food dopers, with a rare discretion for which they deserve great credit, published a rehash in the Bull Moose organ of all the silly trash which H. L. Harris, press agent of the borax trust, the AMERICAN FOOD JOURNAL, slush organ of Secretary Wilson, George P. McCabe and F. L. Dunlap, and official prevaricator of the sword and dagger men of the poisoned food brigade, have circulated about me during the last six years. In one thing I have been more than fortunate, and that is in the character of my enemies. No man can fail to win a warm spot in the hearts of his fellow countrymen who is lucky enough to gain the enmity of such an aggregation of the protagonists of the unholy. I thank the aforesaid organ for having so efficiently helped my campaign in Indiana by publishing the mongrel musings of the food dopers' publicity bureau. The leading motive of this cacophony of the chorus of food debasement is that Wiley refused to qualify at the Coca Cola trial at Chattanooga. In that trial I did refuse to qualify—"as an expert, as a physiologist, a toxicologist, a pharmacologist, a doctor of medicine or a physiological chemist, to the satisfaction of himself or the government"—as the special attorney of the United States wrote to Secretary Wilson in a confidential letter, which Secretary Wilson, hoping to discredit me with the Moss committee, made public.

I am glad he did so. **I am not and never have pretended to be an expert in any one of these branches of science.** I was, however, willing to go on the witness stand and tell of my experiments with the "dopes" validated by the Remsen Board on human health. But "caffeine," which was on trial in Chattanooga, was not one of these, and the court would not admit any collateral testimony.

Dr. Wiley shows the yellow streak not alone here, but in his attitude toward his opponents all along. There has never been any generosity—never any give and take. When he has spoken of those individuals, newspapers and interests that have opposed him and his arbitrary methods, it has always been with epithet. No one he didn't like had in his view any redeeming traits. The early part of his statement quoted above illustrates his whole attitude toward his enemies. The AMERICAN FOOD JOURNAL is a "slush organ," the "official prevaricator of the sword and dagger men of the poisoned food brigade." We can point out one case, however, in which we did not prevaricate. That was when we said Dr. Wiley was not an expert. Dr. Wiley now admits this, and by that admission puts all his friends and defenders in a hole.

By inference, and by any other means he could employ, Dr. Wiley has sought to create the impression that he is an expert. In the Moss committee investigation of his acts in connection with the employment of Dr. Rusby, Dr. Wiley was put on the stand and asked a few questions as to his status. In reply to one of these questions (page 755 of the hearings), he said:

I am a member of the Medical Society of the District of Columbia, a member of the American Medical Association; I am a member of the council of pharmacy and chemistry of that association and have been from its inception, about six or seven years; I am a member of the American Therapeutic Association, of the American Public Health Association; I have been president of the American Therapeutic Society—just closed my term last month. I am president of the United States Pharmacopœial Convention, which is a decennial office, the president being elected once in ten years. I was elected in May, 1910, to serve for a period of ten years. I am a member of the revision committee of the United States Pharmacopœia; I am vice-president of the English Society of Chemical Industry; I am an honorary member of the Franklin Institute and have received the Eliot crescent gold medal for distinguished services in agricultural and physiological chemistry; I am a member of many scientific societies—the American Association for the Advancement of Science, have been vice-president of the American Chemical Association, a permanent member of the council of that society, and am a member of various other scientific organizations.

And all this time Dr. Wiley was not and never pretended to be an expert in any of the branches that would qualify him for one of the honors he declared himself to have been given. By what fakery he gained these honors, by what methods he duped his personal friends into proclaiming him an expert of experts, Dr. Wiley himself best knows. How he will excuse himself for his present exhibition of the saffron streak he alone knows.

MR. M'CANN BUTTS IN

According to New York dispatches of November 8th, some rather exciting events occurred at the candy show in Madison Square Garden. Madison Square Garden is noted for battle and sudden death. This time it was battle, but nothing worse than a battle of words. It was a contest to see which of two "food experts" on opposite sides of the pure food question could talk loudest and make the biggest bet without putting up any money. Out of the obscurity of the press reports we gather that Mr. Alfred McCann, publicity man for a firm of wholesale grocers and importers in New York, who claims to be an "expert" in order to make his work stronger, and who also has organized a "vigilance committee" of advertising men to keep food poisoners and dopesters from advertising their wares and cutting into the business of Mr. McCann's firm, butted in on the candy show and accused some of the bakers' supply men of making profits at the expense of the weak women and defenseless children of the country.

Of the merits of Mr. McCann's argument little need be said here other than that it is "old stuff"—exploded theories and unsupported statements. What should interest the public most intimately, however, is the source of these charges against the bakers and participants in the candy show. Mr. McCann, it should be thoroughly understood, is the publicity man for a private corporation on a salary and not a food "expert" in any sense of the term. For him to assume to criticize the methods or products of a business rival and to claim to do so as an "expert" or the member of a vigilance committee and expect the public to believe that his motives are not ulterior is taxing the public's

credulity. Now note that the dispatches refer only to one so-called adulterant of food—benzoate of soda. Mr. McCann makes no reference to copper sulphate, or, as Dr. Wiley calls it, bluestone. It happens that Mr. McCann's firm is one of a group of importers who have petitioned the Secretary of Agriculture to raise the embargo on the use of copper sulphate, which has been barred from use in foods by the Board of Food and Drug Inspection upon a report by the Referee Board of Consulting Scientific Experts that it is dangerous and injurious. It makes all the difference in the world what kind of an "expert" an "expert" is.

TIGHTENING THE LINES.

George P. McCabe, solicitor for the Department of Agriculture; Lucius M. Tolman, chief of the food inspection laboratory, and Dr. George M. Hoover, assistant chief of the drug laboratory, are on a tour throughout the country which will include every city where prosecutions of food cases are under way, to review such cases as have been held up on any account and determine upon their merits. As a result of these visits, the lines are being tightened and prosecutions of food cases will be vigorously pushed. A number of interesting cases involving technical questions will be brought to trial in the United States District Court for the Northern District of Illinois. Among these are cases involving the Novelty Candy Company and the National Candy Company on charges of using talc in the production of their goods, and the Thompson & Taylor Spice Company on a technical charge covering the labeling of terpeneless extract of lemon. Some phases of both of these questions have been passed upon by the courts in other states, but evidently the Government does not believe the questions involved have been definitely adjudicated.

ERRONEOUS DEDUCTIONS.

We recommend perusal of the article from the *New York Journal of Commerce* on the beef situation in Argentine, reproduced in another part of this journal, as an example of that style of literary production that puts the author in the position of making a seemingly correct deduction from a state of facts, which deduction is really utterly erroneous. In the present instance the author makes his deductions in advance, so that, unless the whole article is read, the error will not be detected, and then not unless the mind grasps the circumstance that the facts in regard to the production of beef in Argentine have been distorted in a way to suggest that, instead of the price of beef being controlled by the law of supply and demand, it will be regulated by the Chicago packers who have interested themselves in the meat business in South America. The situation as it is, is pretty accurately set forth in the *Journal of Commerce*. This could hardly be otherwise, as the facts are compiled from Government sources. But the deductions are erroneous.

NOT THE SUPREME COURT.

Dairy and Food Commissioner Dame of Michigan calls our attention to the fact that, in a reference to a decision in a municipal court on the application of the Michigan oleomargarine law, in the October issue of the *AMERICAN FOOD JOURNAL*, it was made to appear that the Supreme Court of the state had declared the law unconstitutional, when, as a matter of fact, the Supreme Court has made no such decision.

MR. DICKINSON NEW FOOD CASE PROSECUTOR.

Mr. Frederick M. Dickinson, it is announced, will henceforth have charge of prosecutions originating in his district under the Federal food and drugs act, succeeding in that capacity Alfred R. Hulbert, who resigned last month.

Mr. Dickinson was born May 2, 1879, in the town of Warrington, Lancashire, England, and was brought to this country by his parents when two years of age. When in his twelfth year he came to Chicago and secured his early education in the public schools of this city and at Armour Institute.

In the fall of 1898 he entered Lombard College at Galesburg, Ill., and four years later became a law student in the Law School of the University of Chicago. After completing his legal studies Mr. Dickinson returned to Galesburg, Ill., and filled the position of assistant to the county judge of Knox county, in which capacity he had opportunity to become familiar with probate practice. He was admitted to



FREDERICK M. DICKINSON.

the bar in 1906 and immediately began the practice of his profession, associating himself with the firm of Tenny, Coffeen, Harding & Wilkerson. Later he was with Henry Russell Platt and the firm of Mayer, Meyer, Austrian & Platt.

Mr. Dickinson began independent practice in January, 1911, and in December, 1911, was appointed assistant United States Attorney for the District of Northern Illinois. He is a prominent member of the Bar Association and enjoys the confidence and highest respect of all his associates. While attending law school he was an active fraternity man and became one of the founders of the local chapter of the Delta Chi fraternity.

Mr. Dickinson resides at Winnetka, Ill., and his family consists of his wife and two children. He was married February, 1907, to Miss Lora Adele Townsend of Galesburg, Ill., daughter of the Hon. Leon Townsend, president of the Farmers and Mechanics' Bank, a former Illinois state senator, and United States Marshal for the Southern District of Illinois.

United States Department of Agriculture

OFFICE OF THE SECRETARY

FEDERAL HORTICULTURAL BOARD,

Notice of Quarantine No. 2 (Domestic).

MEDITERRANEAN FRUIT FLY.

The fact has been determined by the Acting Secretary of Agriculture that an injurious insect, known as the Mediterranean fruit fly (*Ceratitis capitata*), new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the Territory of Hawaii.

Now, therefore, I, Willet M. Hays, Acting Secretary of Agriculture, under the authority conferred by Section 8 of

the act approved August 20, 1912, known as the plant quarantine act, do hereby quarantine said Territory of Hawaii, and do prohibit, by this Notice of Quarantine No. 2, under the authority and discretion conferred on the Secretary of Agriculture by said Section 8 of the act of Congress approved August 20, 1912, the movement from the Territory of Hawaii into or through any other state, territory or district of the United States of the following fruits, seeds, vegetables and other plant products:

Alligator pears, carambolas, Chinese ink berry, Chinese orange, Chinese plums, coffee berries, Damson plum, eugenias, figs, grapes, grapefruit, green peppers, guavas, kamani seeds, kumquats, limes, loquats, mangos, mock orange, mountain apple, Natal or Kafir plum, oranges, papaya, peaches, persimmons, prickly pears, rose apple, star apple, string beans, tomatoes.

Hereafter, and until further notice, by virtue of said Section 8 of the act of Congress approved August 20, 1912, it shall be unlawful to move any of the fruits, seeds, vegetables or other plant products herein named from the Territory of Hawaii into or through any other state, territory or district of the United States, regardless of the use for which the same is intended.

Done at Washington this 18th day of September, 1912.

Witness my hand and the seal of the United States Department of Agriculture.

WILLET M. HAYS,

Acting Secretary of Agriculture.

Notice of Quarantine No. 3 (Foreign).

POTATO WART.

The fact has been determined by the Acting Secretary of Agriculture that a plant disease known as potato wart, potato canker, black scab, etc., *Chrysophlyctis endobiotica*, Schilb. (*Synchytrium endobioticum* (Schilb.) Perc.), new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the following countries, viz.: Newfoundland; the islands of St. Pierre and Miquelon; Great Britain, including England, Scotland, Wales and Ireland; Germany, and Austria-Hungary.

Now, therefore, I, Willet M. Hays, Acting Secretary of Agriculture, under authority conferred by Section 7 of the act approved August 20, 1912, known as the plant quarantine act, do hereby declare that it is necessary, in order to prevent the introduction into the United States of the disease known as potato wart, potato canker, black scab, etc., to forbid the importation into the United States from the hereinbefore-named countries of the following species, viz., the common or Irish potato, *Solanum tuberosum*:

Hereafter, and until further notice, by virtue of said Section 7 of the act of Congress approved August 20, 1912, the importation for all purposes of the species and its horticultural varieties is prohibited.

Done at Washington this 20th day of September, 1912.

Witness my hand and the seal of the United States Department of Agriculture.

WILLET M. HAYS,

Acting Secretary of Agriculture.

WHOLESALE GROCERS' EXECUTIVE COMMITTEE MEETS.

The Executive Committee of the National Wholesale Grocers' Association held a well-attended and most interesting meeting at the Congress Hotel and Annex, Chicago, on November 11 and 12, 1912. All of the members of the committee except two were present, and a number of prominent wholesale grocers of Chicago were invited to sit with the committee. The Executive Committee consists of the following membership:

President—Geo. E. Lichty, Smith, Lichty & Hillman Co., Waterloo, Ia.

First Vice-President—W. C. McCoraughey, The Star Grocer Co., Parkersburg, W. Va.

Second Vice-President—P. C. Drescher, Mebius & Drescher Co., Sacramento, Cal.

Third Vice-President—Robert G. Bursk, Howell & Bursk, Philadelphia, Pa.

Fourth Vice-President—Robert J. Roulston, McNeil & Higgins Co., Chicago, Ill.

Fifth Vice-President—A. M. Wilson, The E. S. Kibbe Co., Hartford, Conn.

Treasurer—Andrew J. Wellington, Clark, Chapin & Bushnell, New York, N. Y.

Executive Committee—William Judson, Judson Grocer Co., Grand Rapids, Mich.; Douglas H. Bethard, Jobst Bethard Co., Peoria, Ill.; F. W. Hannahs, Wilkinson, Gaddis & Co., Newark, N. J.; Theo. F. Whitmarsh, Francis H. Leggett & Co., New York, N. Y.; Geo. B. Wason, The Wason Co., Bos-

ton, Mass.; D. C. Shaw, D. C. Shaw & Co., Pittsburgh, Pa.; O. C. Mattern, W. M. Hoyt Co., Chicago, Ill.; R. H. Redman, Wright-Clarkson Mercantile Co., Duluth, Minn.; Counsel, Dana T. Ackerly, Breed, Abbott & Morgan, New York, N. Y.

The first order of business was an interesting report made by President George E. Lichty of Waterloo, Iowa, in which he told of his recent trip of five weeks made in behalf of the interests of the association. He visited members and other wholesale grocers in various Pacific Coast points, in Texas and other important markets, and gleaned much information of value to the organization which he heads.

The greater part of the discussion at this meeting of the committee covered the report and work of the Pure Food Committee. It was voted unanimously to continue the work of this committee and to conduct the association legislative work at Washington and in the various states during the year 1913 with the view to having the National Pure Food Law, which is now adopted in about thirty-three states, enacted in all the states. The Pure Food Committee will have an unusually volume of work to perform the coming year, since forty-one legislatures as well as the National congress will be in session.

Matters relative to canned goods received considerable attention at the hands of the Executive Committee. There was a full discussion on the standard of canned goods and unanimous approval was given the Government ruling upon this subject which was issued from Washington this year and is known as Food Inspection Decision No. 111.

Consideration was also given to the question of better containers for canned goods, and the discussion included the national campaign of publicity to promote the sale of canned foods and the matter of co-operation with the National Canners' Association in its efforts to promote more general knowledge of the value of canned foods.

The question of the sale of coated rice was brought up and the committee sustained the action of the Pure Food Committee and the president in their efforts to discourage the practice.

Mr. Fred R. Drake of Easton, Pa., a former president of the association, made an exhaustive report upon the question of the metric system which incited considerable discussion.

The committee also reaffirmed its action in supporting a compulsory weight and measure branding bill and voted to urge the prompt enactment of the Gould-Stevens-Burton weight branding bill which unanimously passed the House of Representatives on August 5, 1912, and is now before the Senate Committee on Manufactures.

It was voted to amend the constitution of the association by providing for a permanent advisory committee, to consist of all the ex-presidents of the association. It was also decided to publish monthly bulletins for the information of the wholesale grocery trade which are to deal in an educational way chiefly with pure food matters.

One of the most interesting features of the meeting was an address by Harry A. Wheeler of Chicago, president of the Chamber of Commerce of the United States. Mr. Wheeler outlined in an eloquent manner the work and purposes of the organization of which he is the official head and commended the National Wholesale Grocers' Association for its important part in the organization of the Chamber of Commerce and support as members.

The meeting from beginning to end was full of enthusiasm and animation and is pronounced one of the most beneficial that has been held by the Executive Committee. The question of place of the next meeting was left to a subcommittee without recommendation.

ORANGES SEIZED IN CHICAGO.

Five carloads of oranges were seized in Chicago November 13th on proceedings in admiralty filed in the United States District Court for the Northern District of Illinois. The charge is that the oranges were "stained and colored to conceal inferiority." The fruit was shipped from Lindsay, California, and consigned to Lindsay Fruit Association branches in various cities.

CONFERENCE OF CANNERS.

Wednesday, November 13th, a conference of the Executive Committee of the Advisory Board of the National Canners' Association took place in the Hotel Sherman, Chicago. About sixty delegates were present. Action on several questions relating to the welfare of the association was taken, and in a meeting with representatives of the National Wholesale Grocers' Association arrangements were made for the promotion of a canned food week during the forthcoming season.

Household Science and the Table

THE THANKSGIVING FEAST.

By Elenora Elizabeth Reber.

Thanksgiving without a feast would not be Thanksgiving at all, and the great army of American housewives are devoting the greater part of their time and energies to planning and preparing a dinner that will long be remembered by those who are so fortunate as to partake of the tempting viands.

It is just two hundred and eighty-five years since the first Thanksgiving was held in America, although it is only since the proclamation by Lincoln in 1863 that the festival has been annually observed. Governor William Bradford of Plymouth colony was the author of the first proclamation, and the blessings which he enumerated therein seem insignificant indeed to the twentieth century recipient of favors so much greater yet which are so often received without a thought of gratitude, because they have become so ordinary in this age of universal peace and prosperity. "They now began to gather in the small harvest," said Governor Bradford, "and fitte up their houses and dwellings against winter, being all well recovered in health and strength, and had all good things in plenty, for as some were thus employed in services abroad, others were exercised in fishing about for codd and bass and other fish, of which they took great store, of which every family had their portion; all the summer was no waste. And now began to come in store of fowle, as winter approached, of which this place did abound when they first came (but afterwards decreased by degrees). And besides water fowle there was a great store of wild turkies, of which they took many, besides the venison, etc. Besides they had about a peck of meal a weeke to a person, or now, since the harvest, Indian corn to that proportion."

So we find that the Thanksgiving turkey is as old as the day itself and the sportive as well as the festal customs of succeeding years helped to typify the bird with the occasion. In the old New England days the turkey raffle and shoot, which were invariably held on Thanksgiving eve, were features of the celebration of the season. All of the most ancient and toughest gobblers for miles around were hunted up and taken to the village store, where the men and boys of the neighborhood were gathered to shake dice, hoping to win one of these relics to take home. In the shoot the turkeys were tied to a stake and the men, standing at a specified distance with shotgun or rifle, tried to kill them. This was sometimes a difficult task on account of their toughness, for they "seemed to absorb shot like cornmeal, and occasionally survived fifteen or twenty of the cruel flings."

In the observance of Thanksgiving today the dinner is the most important part, and of this feast the turkey still retains its place of honor. The table is not loaded to the extreme groaning point that it was in the days gone by, and much attention is now paid to the dainty setting of the table and its decoration, in recognition of the fact that to please the eye is the best beginning of a successful dinner. Not to say that there is not still a surfeit of good things on the ordinary Thanksgiving table, and that digestions are not still taxed with concoctions that it is well are found upon the festive board rarely. A well-filled fruit basket is perhaps the most attractive center decoration for the table, or

flowers if they are available, as they are in cities where cut flowers can be purchased the year around. Chrysanthemums make an appropriate and effective centerpiece and a single specimen may be placed at each plate for a souvenir.

Assuming that a young turkey has been procured already dressed from the butcher, the preparation of it for the oven is the first duty to be performed. Carefully remove all pinfeathers and singe over a blaze, then hold under running water for a few minutes, after which wipe the bird inside and out with a dry cloth which makes it ready to be stuffed, skewered, and placed to roast. Stuff the breast first being careful not to make it too full or it will burst in cooking; then fill the body rather fuller than the breast, sew up both openings with a strong thread, pull the skin over the neck bone and sew it together. These threads will, of course, be removed before sending the bird to the table. Lay the points of the wing under the back, and fasten in that position with a skewer run through both wings and held in place with twine. Press the legs as closely towards the breast and side bones as possible, and fasten with a skewer run through the body and both thighs, push a short skewer through the tail, and tie the ends of the legs down with a twine close

upon the skewer. After rubbing the body all over with salt proceed to sear the outside by placing the pan in which the bird is to be roasted on top of a hot stove, with a tablespoonful of suet or drippings and a tablespoonful of butter to melt in it; when the mixture boils rub first one side and then the other side of the breast in it until it becomes a pale brown. Then rub the drumsticks and other parts that come in contact with the pan in the same way, moving the turkey continually to prevent it from browning too much or sticking. The object of this searing is to form a crust over the outside and prevent the rich juices from escaping. Put the pan containing the turkey in a



READY FOR THE GUESTS.

hot oven and allow about fifteen minutes for each pound for the roasting process. The basting is easily done from a pitcher in which flour, water, salt and pepper have been mingled in the proportion of a heaping tablespoonful of flour, a heaping teaspoonful of salt, and a saltspoonful of pepper to a pint and a half of water. Begin to baste after the first fifteen minutes and continue at intervals of a quarter of an hour until almost done, then baste every ten minutes.

Some cooks think that larding improves the flavor of a turkey, and as the process is a simple one it is worth trying. Cut strips of firm bacon fat, two inches long and an eighth of an inch wide, and make four parallel marks on the breast of the bird. Thread a strip of the bacon in a larding needle and insert it through the breast, being guided by the marks, and leaving an equal length of fat protruding at each end. Put the strips at intervals of half an inch on the two lines on each side of the breast and proceed to roast the turkey in the usual way.

In the matter of stuffings for the turkey there are almost as many varieties as there are flavorings. The plain bread-crumb dressing should be made from bread two or three days old. Pare off the crusts and soak them in cold water for ten minutes and then squeeze dry. Crumble them up and mix with the crumbed inside of the loaf, add salt, pepper, chopped parsley and celery salt to suit the taste, and bind

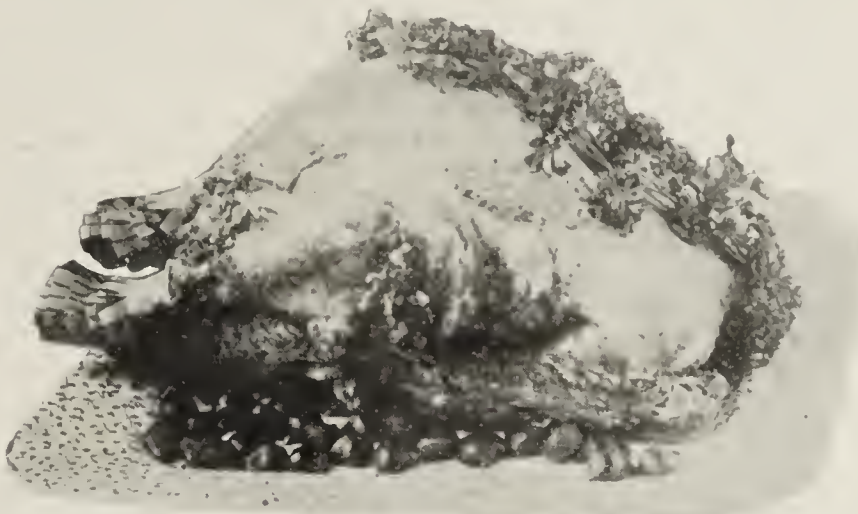
together with a half cupful of melted butter and two unbeaten eggs.

Chestnut Stuffing: Peel, skin and cook tender enough chestnuts to make a half pound when they are chopped fine. Add to the chestnuts four ounces of butter, three ounces of breadcrumbs, a little grated lemon peel and powdered mace, salt and a pinch of cayenne. Bind the mixture with the beaten yolks of three eggs. Sage is a more pleasing flavor than mace to some and may be substituted by those who prefer it.

New England Pudding: Our forefathers considered a Thanksgiving dinner incomplete without an Indian pudding and the following recipe comes from a direct descendant of the Mayflower colony, and she vouches for its being the original formula: The ingredients are: Three quarts of milk, two small cupfuls of southern cornmeal, seven-eighths of a pint of pure New Orleans molasses, one even teaspoonful of salt, a tablespoonful of butter. If the milk is not rich the addition of two eggs is necessary. Scald the meal in one quart of the milk, then allow it to cool. Add the salt, butter, beaten eggs and molasses, stirring the whole vigorously, after which pour it into a stone jar, then add the cold milk. Be careful now to give only a few movements with the spoon. Cover and place in a slow oven, letting it stand six or seven hours or more. Four hours in stronger heat will bake it nicely, but in order that this table delight shall arrive at its highest point of excellence it has need of the hours of slow heat, by which the granules of meal are dissolved "into a delicious, quivering, amber-colored jelly, wholly unlike the usual heavy, compound yeleft Indian

Garnish with a bunch of flowers, slices of lemon and hard sauce flavored with nutmeg.

Thanksgiving Spice Cake: Blend a half cupful of molasses with one cupful of maple sugar, then add one tablespoonful of powdered cinnamon, one nutmeg grated, and a teaspoonful of powdered cloves. Stir a teaspoonful of soda into a cupful of sour cream and then put both ingredients into the cake mixture. Chop fine a pound of seeded raisins, one pound of currants and a half pound of dates. Add the



TURKEY GARNISHED FOR THE THANKSGIVING TABLE.

chopped fruits alternately with three and one-half cupfuls of sifted flour.

Cranberry Jelly: Pick over and wash a quart of cranberries. Drain off the water and put the wet berries in a saucepan with a scant teaspoonful of soda and a pint of water. Place on a brisk blaze and as soon as the first berry pops turn off the water. This treatment of soda thoroughly cleanses the cranberries and removes any bitter taste they may have. Return the berries to the fire with one cupful of water, cover and stew until tender, then drain through a sieve. Return the pulp to the saucepan and boil for a few minutes after which add two cupfuls of sugar and stir and boil just long enough to melt the sugar. Rinse a mold with cold water and sprinkle with granulated sugar, then pour the cranberries, when nearly cold, into the mold and set in a cool place to become firm. This jelly may be made the day before using.



A STEAMED FRUIT PUDDING.

pudding." It may be served either hot or cold, most people preferring it cold, and the addition of whipped cream makes the dish a perfect one.

Steamed Fruit Pudding: Take a half cupful of shredded figs, one-half cupful white breadcrumbs, one-half cupful chopped suet, one-half cupful brown sugar, one cupful sweet milk, three tablespoonfuls of orange juice and grated peel, one fourth cupful flour, one-half cupful chopped English walnuts, one rounding teaspoonful of baking powder and four eggs. Flour the figs and suet, then to the breadcrumbs soaked in milk, add the beaten egg yolks, figs, suet, nut meats, flour and baking powder, stirring constantly. Lastly add the stiffly beaten whites of the eggs. Fill a buttered mold three-fourths full, cover and steam for three hours.

INTERESTING DATA ANENT POULTRY.

The technical definition of the word "Poultry" may be said to include all birds domesticated for their eggs or flesh. Game, or wild birds of any description, cannot be, strictly speaking, classed as poultry, even though they may be closely related to the tame species. The common varieties of poultry are chickens, turkeys, geese, ducks and pigeons, all of which are domesticated fowls.

Likewise all of the varieties of poultry just named are distinguished by having light and dark colored meats on different parts of the body. We are told by one writer that while the difference in the color of the flesh is not fully understood from a scientific standpoint, in general it is believed that the flesh which is white has less muscular power, and it is those birds whose chief way of locomotion is walking that have the white meat on wings and breast. On the other hand birds that are much on the wing have all dark meat, the exercise of the flying muscles causes a greater amount of blood to flow to those parts and the flesh becomes darker.

There is probably no task more trying and approached with greater indecision by the inexperienced shopper in things to eat than that of selecting poultry in the market. The fear of choosing an ancient fowl which even the cleverest manipulation in cooking cannot make tender and palatable is an ever-present one. It is lamentably true that much "spring" poultry is not "true to name" and the signs by which one must judge are not by any means infallible ones, while the say-so of many market men is equally unreliable and the purchaser must assume her own responsibility when buying fowls of any kind in the open market.

As to the marks of good dressed poultry in general a good, fresh bird shows a well-rounded form, with neat, compact legs and no sharp, bony angles on the breast, indicating a lack of tender white meat. The skin should be clear yellow and free from blotches. If it looks tight and drawn, it is evidence of the bird having been scalded before picking.

The flesh should be neither flabby nor stiff, but should give evenly and gently when pressed by the fingers.

One of the best known ways of testing the age of fowl is to attempt to bend the point of the breastbone farthest from the head. In a very young chicken it will bend sidewise like cartilage. A bird a year or so old will have a brittle breastbone, while in an old bird it will be tough and hard and will neither bend or break. Dealers who wish to prevent their customers from taking advantage of this simple test often break the breastbone so that it gives no reliable evidence.

The feet of a young fowl are soft and smooth and become hard and rough as the bird grows older. Turkeys up to a year old are said to have black feet, which grow pink up to three years old and then turn gradually gray and dull. In a pigeon red feet are said to be a sign of age.

The methods of cooking poultry of all kinds are well known or easily learned from any cookbook. An old fowl can sometimes be made tender without having all its flavor stewed away by cooking, as in a French bain-marie, where the pot is kept in warm water for a long time, or in a special oven with walls which do not conduct the heat readily, where it is set for hours in a warm air chamber.

The amount of heat needed to soften the fibers and develop the flavor of a bird of course depends largely on its age and toughness. Long, slow cooking, as in stewing or boiling, softens the fibers more thoroughly than a shorter exposure to intense heat, as in roasting.

The length of time required to cook a fowl depends upon its size and age, but a general rule for roasting chickens and turkeys is twenty minutes to the pound. Duck and geese require a long time for cooking tender.

The above information, as well as the following paragraph, is gleaned from a farmers' bulletin of the United States Department of Agriculture of which Helen W. Atwater is the author, and may be considered as authoritative. This writer in dwelling upon the subject of the parts of poultry which should be eaten, gives the following interesting information: "Chicken feet, skinned and properly dressed are used for making broth or other purposes in Europe, though they are usually thrown away in this country. Few American cooks would use cocks' combs, yet the French cooks prize them. As regards the skin which is seldom removed from poultry in the ordinary household methods of preparation, some consider it very palatable, especially if cooked until rather crisp, while others will not eat it under any circumstances.

"The liver and less commonly the heart are liked by many and are often sold separately in large markets as delicacies, though in many small towns and country regions they would not be so considered. In large markets the demand for the liver is so great that it is often necessary to insist that it be left in the dressed fowl, otherwise it will be removed by the dealer, as he can readily sell chicken livers for a fancy price.

"The head of a bird is not commonly eaten in the United States, yet European cooks frequently leave it on the cooked fowl, since the brain is considered a delicacy. These usages recall traditions of Roman or Mediaeval feasts with dishes of larks' tongues and peacocks' brains, and they perhaps do not seem unreasonable even to one not familiar with them. The same can hardly be said of the custom observed in some regions of Germany, and possibly elsewhere, of eating the partially digested green feed removed from some game birds. This is especially cooked and is said to be palatable."

Interesting Food Notes

GEYSER AS FIRELESS COOKER.

Even the Maori inhabitants of New Zealand who live in the geyser regions have fireless cookers, but not the kind used here. They use nature's "fireless cooker," the small geysers of that region, to prepare their food. Using a box, a basket or a bag, depending on what they are cooking, they sink the receptacle in the moist mud over a steam hole, which makes an admirable oven. The women not only cook their meals, but do their washing in these baby volcanoes.

BOLTING OF FOOD NOT HARMFUL.

Professor L. F. Foster, in a paper read before the pharmacology section of the Eighth International Congress on youngsters present a twist which for size at least has surely rarely been equaled. Weighing no less than 180 pounds, it had a breadth of 1.70 meters and a length of 3.20 meters, and

Applied Chemistry, had this to say on the practice of "bolting" food: "Our data indicate that when meat is bolted in fifteen millimeter cubes the difference in utilization is not pronounced and cannot be considered as furnishing an experimental basis for the belief that food bolting is harmful. In other words, our data fail to show the advantages of fletcherism or the harmfulness of food bolting."

A MAMMOTH LOAF OF BREAD.

Bakers in Germany are fond of making odd experiments, the following being reported from Duisburg in Westphalia. At a children's party recently held in that town there was exhibited and afterward cut up and distributed among the was thus found sufficient to supply a satisfactory afternoon collation to as many as 500 boys and girls.

ICE CREAMS AND WATER ICES.

There are two distinct kinds of ice cream, viz: the Neapolitan ice cream, with more or less eggs in its composition, and especially adapted for large dishes, such as shells for bombs and iced puddings, and the Philadelphia ice cream, made from plain cream. The question of the relative merits of Neapolitan and Philadelphia cream is one of either taste or education. Both are good of their kind, but the Neapolitan cream is better adapted for all kinds of nut ice cream, while fruits of any description go better with the plain cream. For water ice only the best fruits and sugar should be used, for it is an erroneous opinion to think that any fruit is good enough for water ice, as the fruits are mashed, anyhow.

MILKWEED A VALUABLE FOOD PLANT.

Milkweed, the common, wild variety that grows in every rocky pasture, in meadows and by roadsides in abundance, is said by a recent writer to have availability as a food. Its large, thick, smooth leaves are familiar to all, and its deep, dull pink tuft of flowers, and later its seed pods, filled with delicate floss and flat brown seeds. When it is broken off, a thick, white, milky juice exudes. This is rich in nutrition. This common and luxuriant weed is now being cultivated in gardens as a valuable food staple and makes one of the most delicious of vegetables. It tastes almost exactly like asparagus and is cooked in much the same way as spinach. It has been found to be rich in natural salts and nutrition and is easily cultivated.

CONSERVATISM OF THE CHINESE.

No industry of Formosa has continued with so little change and innovation as has tea culture. For the last fifteen years the total production has varied little, and the aggregate area has remained virtually the same. The opening up of new plantations has indicated the abandonment of old plantations of practically the same acreage. The conservatism of the native Chinese, it is averred, inhibits the production beyond the usual yield of 20,000,000 pounds, lest the value be thereby decreased. When any year's crop exceeded a previous record, the cause was favorable weather conditions, and not due to any extension of the cultivation. The total area of tea plantations in Formosa at the end of 1911 was 83,452 acres, a decrease of 502 acres compared with the preceding year.

SCIENTIFIC MANAGEMENT OF THE OYSTER.

The oyster industry has progressed far beyond the taking of oysters from creeks, estuaries and bayous, and vessels with steam power "catch"—better "dredge"—1,200 bushels an hour. The oyster farms lie forty, fifty and sometimes sixty feet beneath the surface of the ocean currents and are worth as much as \$700 an acre. The propagation of the oyster, once haphazard, is now aided mechanically and so successfully that the investment in the business is very large.

There is still in mind the picture of a man standing, with legs spread for balancing, in the stern of a dory. The water is running in waves three or four feet high. He lets down two long rakes with which he gropes on the bottom. They close in on a mass of mud, stones, weeds and shellfish and this is deposited for assortment in the bobbing boat. This laborious and slow method has given way to the steam dredge, and we are getting more oysters, naturally, by many fold.

FACTS ABOUT CORN.

More manufactured foods for human consumption are now made from corn than from any other grain (in fact, we might say than from all of them). Also the grain is put to a great number of other uses than as food. Vast quantities are made into alcoholic liquors. From corn are made three kinds

of mixing glucose, four kinds of crystal glucose, two kinds of grape sugar, anhydrous sugar, pearl starch, powdered starch, refined grits, flourine, four kinds dextrine, corn oil, corn oil cake, a rubber substitute, corn germ, granulated gum, and a score or more of cereal products. In foreign countries corn oil is used in the manufacture of soaps. The shell or outer fiber of the stalk is converted into fiber. The pith or inner portion is ground and converted into cellulose, used in packing cofferdams of warships. Varnish is made from the outer shell. The leaves, husks and portions of the stalk are used as feeds. The cobs are made into cob pipes; again, by a process of fermentation, they are made to yield a good vinegar. If boiled in common sugar syrup they are converted into a counterfeit maple that is hard to detect. Of what other grain product can so many uses be claimed?

CANDY OF THE HAREM.

The Balkan war centers interest on the candy of the Turks, who of all nations are universal users of sweetmeats. The illustration depicts "rahah-lokum." It is in sausage-like form and as long as a policeman's club. In the making, the almonds are dipped and dried alternately in the gelatinous bat-



ter till the desired thickness of deposit is attained—much as, in fact, our grandmas made their tallow dips. This protective coating preserves well the delicate flavoring of the bleached almonds. This same candy is made in New York and other metropolitan cities for sale to customers of Turkish origin.

PRESERVATION OF MEAT BY TRYING.

From Paris comes the announcement that the well-known inventor, Charles Tellier, one of the founders of the modern refrigeration industry, now in his eighty-third year, has invented a new method of preservation applied to meat which is regarded as being of importance. The freshly slaughtered beef is first placed in autoclaves, in which a vacuum is created by means of an air pump, for the purpose of freeing the animal tissues of air which may be entangled therein, and to open the pores, as a preliminary to the succeeding process. After about one-half hour oxygen and ozone are conducted into the apparatus in order to destroy the germs adhering to the surface of the meat. After a suitable length of time has been allowed for the ozone to operate, the atmospheric pressure is again restored, with a view to forcing the gas into the flesh and killing off all bacteria below the surface. The vacuum is then created again, after the autoclave has been filled with carbonic acid for the purpose of driving out all air, the residuum of carbonic acid being absorbed by caustic lime. The process is finished within about twenty hours. At the end of this time a brownish crust has formed on the surface of the meat, which completely encloses the exterior from any contact with the air and thus renders impossible any contamination from without. The outer surface of the meat is condensed to a thick, resistant and leather-like layer. It is said that in this condition the meat can be kept for months even at high temperatures without any trace of decomposition.

A MOVEMENT TO DIGNIFY HOUSEHOLD LABOR.

A Bureau of Household Research has been opened at Broad and Brooks Streets, Philadelphia, under the direction of John B. Leeds, Professor of Household Economics at Temple University. The purpose of the bureau, as indicated in its prospectus, is to solve the servant girl problem by raising household work to the dignity of a profession. Students who register with the bureau will give one-half of their time daily to

study and recitation at Temple University, and the other half to housework. Housekeepers may have one student assisting one day in the week up to four students every day. Students will be given an opportunity to either work in all lines of general housework or to specialize in cooking, sewing, laundry, nursing, care of children, etc. Students must be graduates of a high school or have done equivalent work in order to register with the bureau. Those taking courses in kindergarten and primary school education at Temple may register with the bureau for practice in the care of children. Students will live at their own homes, or, if not resident near the university, will reside at a club house adjacent to the university in which the bureau will be located. Work will be paid for by the hour according to the proficiency of the student worker. The practice work done by the students will not only be of benefit to themselves and of assistance to housekeepers, but careful records will be kept which will be of value in the scientific research carried on by the bureau in the direction of the standardization of household work. Besides practice work in individual homes, arrangements are also being made for students who wish to work in institutions, apartment houses, hotels, etc.

HARVESTING BLACK RICE IN CANADA.

Along the shores of Rice Lake, which separates the counties of Peterborough and Northumberland, Ontario, there is much life these days. The arrival of the black rice harvesting time is the signal for the Indians to move out among the rice beds of the Hiawatha Reserve. The Alderville and Hiawatha Indians usually muster forces about the middle of September and repair to the mouth of the Keene River.

Simplicity and primitiveness characterize the preparation of the rice for market. Although the greater portion of the crop is retained for home consumption, that which is exchanged for barter, or in some cases money, at Keene, Harwood, and other points, represents the surplus. There are five operations in connection with the harvesting of the rice, which are briefly subdivided as follows: Gathering, drying, parching, thrashing, sifting.

In gathering, sheets are laid in the bottom of the canoe and a start made for the rice beds. A man sits in the bow of the boat and paddles, while his helpmate takes up a position in the stern and with the aid of two stout sticks bends the stalks over the canoe and thrashes the rice into the bottom of the boat. This continues until the boat is nearly full, when the rice is taken to shore and spread out to dry. After a few hours in the hot sun the grain is ready for the parching. This is usually done by the women, who place it in a large iron pot and heat it over a slow fire, stirring it continually until it is "parched."

It is then ready for the thrashing. This is done by one of the men putting it in an iron pot or large wooden bowl hollowed out of a log, and with moccasins on his feet and trousers tied tightly around his ankles, he jumps on it until the grain is separated from the chaff. The last operation is that of sifting. The rice is poured into birch-bark baskets, in small quantities, and squatting down in front of the tents on the shore, under the trees, or any place where there is a good breeze, the women gently shake until the chaff is separated from the grain and is blown away by the wind. Crude as it may seem, it is exceedingly effective, and the workers are scrupulously clean throughout the whole process.

MEETING OF ILLINOIS FOOD STANDARDS COMMISSION.

A meeting of the Illinois Food Standards Commission was held in the office of the State Food Commissioner, Manhattan Building, on November 13th, for the purpose of considering the proposed standard for ice cream. Considerable evidence was heard by the Commission, including statements from a number of local ice cream manufacturers.

This matter has been under consideration by the Commission for some time; a large number of hearings have been held, and a great deal of information secured and compiled. The final report of the Standards Commission on the subject of ice cream will shortly be made.

H. R. WRIGHT DES MOINES MANAGER FOR CREAMERY COMPANY.

Mr. H. R. Wright, formerly State Dairy and Food Commissioner of Iowa, has been appointed manager of the Des Moines, Iowa, branch of the Beatrice Creamery Company commencing his duties November 1st. Mr. Wright's experience as dairy commissioner will be of particular value in his new work and both he and the creamery company are to be congratulated on the new arrangement.

Argentine Beef Situation

Soaring prices for beef, particularly acute this fall, when for the first time since Civil War days animals sold on the hoof in Chicago for more than 10 cents a pound, have led many to express the opinion that, if it would, the United States could obtain a supply from the Argentine at less cost.

This view is not supported by all persons familiar with the meat situation in the Southern republic. They admit that beef is enough cheaper in Argentina so that it could probably pay carrying charges, and even the present tariff, and still sell for less here than the domestic supply, but they declare that the Chicago packers now so control the industry in the South American republic that they are in a position to hamper shipments to this country to be sold in competition with their own supply.

That meat will before long be imported into the United States from the Argentine is not disputed, but it is said that when this time comes it will be the Chicago packing houses that will arrange the shipments, and prices will be fixed to conform with their business in this country and not to compete with it.

James Davenport Whelpley, whose inquiry into the Argentine meat industry was published by the Department of Commerce and Labor in 1911, said in his report:

"Argentina has been looked upon as a competitor of the United States in the beef industry, and has even been considered by some as a possible source of cheaper meat for this country. The present outlook there lends no color to such supposition. Shipments of beef from the River Plate to the United States may come shortly, but they will probably be directed by the same interests which supply the market here, not in opposition to them."

The meat packing trade of the Argentine is in the hands of seven companies. Two of these, La Plata Cold Storage Company and La Blanca Company, are avowedly owned by Chicago interests. The former is a Swift holding. The exact ownership of the latter is not publicly stated, but it is understood to be held jointly by Swift, Armour and Morris interests. Besides these two plants, the United States packing companies are believed to have interests in a number of the others, while relations of a most harmonious sort exist among all seven.

But taking North American control at its minimum—the two companies named—it appears that it is or soon will be in a position to dominate the export meat trade of Argentina. The packing plants of the Chicago interests are admittedly the progressive factors in the industry. In eight years the Plata Cold Storage Company has jumped from the smallest to the largest in the country. Taken together with the Blanca Company, it ships more than half of Argentina's chilled beef and a third of the total beef export, chilled and frozen combined.

It is in connection with chilled beef—in distinction from frozen—that the operations of the North American companies in the Argentine are most significant. Previous to their entrance into the field, meat was sent abroad frozen hard, usually at a temperature of about 14 degrees below zero. The United States companies set out to develop the trade along the lines in vogue in this country—that is, preserving it at a temperature just above freezing, without material impairment of its texture or flavor. Their efforts have revolutionized the business and compelled the other companies to follow in their wake. Export of chilled beef has, in the course of the last few years, risen from nothing to principal position, and seems destined practically to displace the frozen product.

Since chilled beef requires a higher grade of stock than that necessary for the frozen product, the Chicago packers have been seeking to raise the quality of beef stock in the Argentine. Already the republic has the best cattle in South America. It has advanced from the days when animals were sent to market straight from the pampas, and by use of alfalfa is able to mature them a year earlier than formerly. Estancia owners, who cannot raise their own alfalfa, send their stock to other pastures for fattening before sale. But alfalfa-fed stock is not the equal of corn-fed stock for chilled beef purposes, and it is corn feeding which the Chicago companies are trying to encourage in Argentina.

With this end in view, the Plata Cold Storage Company astounded the entire republic at the time of the international expositions at Buenos Ayres in 1910 by sending a representative to the fat stock sale who paid 11,500 pesos each for five steers—about \$5,000 apiece in our money—and for a total of 177 head gave 310,600 pesos—\$771 each in United States cur-

rency. It was estimated that the available beef on the five steers bought at top price cost the company about \$5 a pound. Of course, it was an advertising investment. The object was partly to make known the company's product in England, but still more to show Argentine cattle growers what kind of stock it wanted, and to convince them that it was willing to pay for it.

Aside from the strong position of the Chicago packers in Argentina, there are other reasons given by persons familiar with the meat industry for believing that that republic as a source of cheap beef for the United States presents difficulties.

It is pointed out that land values have been appreciating in the Argentine by leaps and bounds, and that the constantly increasing cereal production is driving the cattle industry farther and farther back into the frontiers, with increasing charges for transportation. The area of land under cultivation has doubled in ten years and quadrupled in fifteen, with an advance in cattle prices of 50 per cent within a decade. Moreover, Argentina already has ample and expanding markets for all the beef it can produce. Quoting again from the report of Mr. Whelpley:

"Even were it not for the position of the American packers in the Argentine field there would be no likelihood that United States consumers could secure a supply from that quarter at less than prevailing rates, and probably not at such low figures. For the year 1909 Great Britain took 98 per cent of the exports, both of beef and mutton, but this represented only 65 per cent of Great Britain's total imports of beef and 27 per cent of her total imports of mutton. It is apparent, therefore, that in Great Britain alone the market can be much extended. Moreover, it appears that the Continental nations of Europe, which have heretofore used practically no cold storage beef, are on the point of taking up that product on account of the scarcity of live animals and consequent rising prices. Hence, if the United States wants Argentine meat, it will be necessary to pay for it at European prices."

Since this was written there have been advances in the cost of beef in this country, and it is now asserted that domestic prices are higher than those prevailing in England. It is hard to be exact about this. Retail prices are what count with the consumer, and these vary so according to cut, quality and location of shop that comparison is hazardous. Many persons who have quoted English prices have probably given figures on frozen beef, the usual meat of the poor there, but a product which is not used in the United States and which can be made from much inferior animals.

It is even more difficult to compare meat prices in the United States with those of Argentina than with those of England. The Argentines do not eat cold storage beef at all. Like the Latin nations of Europe, they insist upon the fresh killed product. Refrigerated beef is entirely for export. Moreover, meat is commonly sold at retail there by piece, rather than by weight, just as a cabbage or a cantaloupe would be sold here. Steers are likewise sold to the packing companies by the head and not by weight. The price is upward of \$50 apiece for animals which range around 1,200 pounds. Roughly speaking, this may be said to be about half of the rates prevailing here, but detailed comparison is out of the question.

Frederick W. Goding, United States Consul at Montevideo, Uruguay, estimated in a recent report that fresh meat could be sent from the River Plate to the United States for a cent and a half a pound. Even with another cent and a half a pound added to cover the tariff, there would appear to be sufficient margin between Argentine and domestic prices to make it possible to sell South American beef here at less than present rates. But persons familiar with the Argentine situation insist that such trade would have to be developed against the full opposition of the Chicago packers, both in this country and the southern republic. They are dubious about its success, therefore—certainly unless undertaken by a company with resources enough to control its own steamship service and establish its own plant on the River Plate.

So far as known, the Chicago companies have made no plans for sending meat here from Argentina. Their entrance into that field was for the purpose of securing meat for their English trade which they could no longer obtain in this country, due to increasing domestic consumption. Within the last 10 years the export refrigerated beef trade of the world has been practically transferred from the Mississippi Valley to that of the Rio de la Plata. A decade ago the United States was annually shipping abroad 150,000 tons. Last year the amount fell below 20,000. In the same period Argentina's refrigerated beef exports have risen from little more than nothing to more than 250,000 tons annually.—*New York Journal of Commerce*.

OBITUARY

Dr. Morris Loeb.

Dr. Morris Loeb, president of the Chemists' Club of New York, died at Seabright, New Jersey, on October 8th, of pneumonia and typhoid fever. From the *Percolator*, organ of the Chemists' Club, we quote the following tribute:

"It is for us simply to express our appreciation of a friend and fellow member. He was a charter member at the organization of the Chemists' Club in 1898. Twice he was vice-president and twice president. It was during his first presidency in 1909 that the idea of having a club house of our own, an idea which had been vaguely in our minds before, now took definite shape. His wise counsel, his time and his generosity were unselfishly placed at the disposal of the Chemists' Club, and it is not too much to say that to him more than to any other one man the chemists of America are indebted for a Chemists' Club and club house absolutely unique in the world. When we occupied the new club quarters this same wise counsel and generosity were invaluable. The entire furnishings of Rumford Hall, of the Priestley room, of the library and museum were at his expense. Scarcely a room in the club is without some mark of his thoughtfulness and generosity. Though his path through life was smoothed more than happens to most of us, his days were filled with activity, and he was a living embodiment of how five-fold it increases the value of a benefaction when the giver's time and counsel and interest go with it. His many memorials in the club house will not be needed to make us remember him."

James Schoolcraft Sherman.

James Schoolcraft Sherman, candidate for vice-president of the United States on the Republican ticket, died at his home in Utica, New York, on October 30th. Mr. Sherman was born in 1855, one of six children of a thrifty farmer. He not only learned to labor but he loved work and sought knowledge. He graduated from Hamilton College in 1878. He followed law as a profession and at the same time engaged in mercantile affairs. The first \$500 he saved was invested in a canning factory which his father had founded. The undertaking prospered, and now includes four factories. At the time of his death he was president of the Utica Trust and Deposit Company.

At the early age of thirty-two he was elected a member of Congress. He served through nine sessions, of which seven were consecutive. He was a prominent member of the House of Representatives when he was elected vice-president. Always serving on important committees, he was often called to the speaker's chair, being an expert parliamentarian. His record is irreproachable, an honor to his state, the nation and a precious heritage to his family.

To Mr. Sherman the canned foods industry is indebted for the enactment into law of the bill preventing false branding. It was primarily designed to protect New York cheese from being falsely designated, but the Maine packers, through the efforts of their counsel, the late Francis B. Thurber, succeeded in having the bill broadened to cover the misbranding of all foods.

Views of the Press

Peculiar Attitude of Wine Growers.

A very curious exhibition of inconsistency and unwillingness to accept direct responsibility has developed in the attitude of some of the San Joaquin wine grape growers in the "wet and dry" fight in that county. It is reported that certain of the growers are advocating the "dry" policy, and this attitude in men who make their living by selling the raw material for wine is naturally resented by the wine men on whom they have unloaded their produce. It seems an indisputable axiom that no prohibitionist should raise and sell wine grapes, and it seems equally evident that no one who raises and sells wine grapes should pretend to be a prohibitionist. A circular is being sent out by George West & Son, Inc., the large wine merchants, calling attention to this fact, as follows:

"The matter has been brought to our attention in which a number of parties with whom we have contracts for a term of years have signed a petition in the supervisorial districts requesting a vote on the liquor question this November.

"We call your attention to the grape contract itself, in which it is stated that should the state of California pass laws prohibiting the manufacturing and selling of wines, we reserve the right to cancel the contract.

"We heartily co-operate in the support of abuses of liquor in any specific cases, but the vote of a supervisorial district is not the suppression of specific cases.

"It appears to us to be a step forward in the general movement to 'dry' the state of California, and we think it worth while for you to thoroughly investigate this matter.

"We have in our county 40,000 acres of grapes, representing an investment of \$10,000,000. If California will not permit the sale of wines, it hardly can be expected that other states will do so, especially if the people where wine is produced make it a contraband article.

"It does not seem consistent to us for a grape grower to expect to market the product of his vineyard and then by his own action try to eliminate our market, thus preventing us as far as is possible from disposing of the product of his own vineyard."—*California Fruit Grower*.

The Potato Font of Youth.

Prof. Elie Metchnikoff of Paris apotheosized buttermilk as the font of perpetuated youth and pointed to Bulgaria. Dr. J. H. Kellogg, famous originator of breakfast foods and health regimens, apotheosizes the potato as the true enemy of old age and points to Ireland.

A prejudice against starchy foods has caused science to disparage the potato unjustly, according to Dr. Kellogg, who insists that the popular predilection for the vegetable is a trustworthy index of its merit. The starch of the potato has much greater dietary value than the starch of cereals or arrowroot, he says, being more easily digested. That the potato is not a perfect food owing to its fat unit deficiency is conceded; nevertheless its qualities as an old age preventive are established by reasoning as follows:

It contains just below the skin a greater percentage of certain alkaline salts than any other vegetable used as food by civilized folk. These salts check tendencies toward a lowered alkalinity of the blood caused by meats. Lowered alkalinity is the chief cause of gout, rheumatism, Bright's disease and especially that hardening of the arteries which is old age's distinctive sign. "The proportion of centenarians in Ireland is more than ten times as great as that of England," says the doctor. "There can be no doubt that the free use of potatoes by the Irish is in a large measure responsible for the remarkable longevity of this nation."

If you want to keep young, accordingly, eat potatoes—always potatoes cooked with their jackets on. Pending the time when science will give us in concentrated form the youth preserving active principle of the potato, why not combine the Metchnikoff and Kellogg remedies? Why not make a sure thing of it and eat potatoes with buttermilk? That some persons do not find the prescription worse than old age itself is evident, for they have been observed to consume the formidable combination with signs of relish and satisfaction. —*St. Louis Post-Dispatch*.

Maple Sugar a Feast for the Gods.

If the American people ever go into the business of forest farming, it is to be hoped they will turn with especial zeal to increasing the supply of maple sugar.

Maple sugar is a feast for the gods when the gods were young. Maple syrup is the nectar that Zeus would have sipped, if there had been any maple trees on Mount Olympus. Maple candy—ah! there one comes upon heights which only the classic poets and Marse Henry Watterson may scale without stumbling.

Compared with maple candy, the chocolate cream is banal, the mint julep is crass and plebeian; and the finest efforts of Paris confectioners no more than sweetened hash.

The boy who has never taken thick maple syrup, dropped it on clean snow, and "chawed" the resulting "packwax" does not know how great a blessing nature gave him in his sense of taste.

Plant trees. Plant any kind of trees. Plant eucalyptus if you can, plant chestnuts if you must, plant oaks if you think your descendants will care for quarter-sawn furniture. But plant maples as an offering to the race, and hand down the tradition of sugaring time that the race may know its mercies.—*Chicago Journal*.

Our Complicated American Menu.

Just how many years it has been since the last American meal was served in the "loop" it would be hard to say, but it has been many, many years. There was something fresh and unspoiled about the American meal, and it appealed to what was fresh and unspoiled in the American character. A little primitive, no doubt, but appetizing and decidedly wholesome.

The great point of the American meal was its candor. Food then wore no elaborate disguise and was not ashamed of its origin. Meat tempted your tongue by its natural savor; it relied not on condiments or sauces. If it couldn't pass muster in its natural juices, so much the worse for it, and no glib waiter could seduce you into betraying your stomach. Everything stood or fell by its native quality, and the waiter, knowing this, exercised a little more care when he brought your order.

But now that the standardized menu, a mongrel product out of European ingenuity by American prodigality, has ousted the American bill of fare, you may dine from Maine to California on precisely the same stale dishes and be hungry after all. Even the country inn will serve you six courses, all bad, instead of plain fried chicken and delicious pumpkin pie. Really there is nowhere to eat in our cities nowadays.

Having taken so much pains to imitate Europe in our food, we might at least expect Europe's approval. But do we enjoy it? By no means. Two European hotel keepers left New York the other day for home. In departing they said about our food: "We found the cooking in the provincial cities a little too complicated. It was evident that there was a desire to give the very best, but they did too much. There was not enough of the natural taste left in a piece of meat or a vegetable." No, indeed, there isn't.—*Chicago Inter Ocean*.

Bread Kneading by the Feet.

It really seems like a chapter out of the dark ages to read of "foot-kneading" in a bakery. But it seems the flurry over the modern revival of the ancient method in an Eastern city was not without foundation. Amazing as it may be to twentieth century bakers, and disgusting as it may be to the thought of twentieth century bread eaters, the executive officer of the local Board of Health writes to the *Bakers' Helper* that his officers found this: "Not only were they kneading by feet, but they were taking urchins from the street and using them to do the kneading. Now, however, a new baker has been employed, and proper methods installed." Something on a level with this turns up every little while—often enough to make bakers boast very carefully. And it also serves to put additional emphasis on the present day bakery slogan "Clean Up or Close Up."—*Bakers' Helper*.

FOOD LAWS ENDORSED BY ILLINOIS WOMEN.

Resolutions endorsing the national food and drugs act and the Illinois dairy and food law, together with the State Food Commission's administration of them, were adopted at the annual convention of the Illinois Federation of Women's Clubs, held in Aurora from November 12th to 15th. This is the most influential state women's organization in the west, and the endorsement of the state administration of the food laws has all the greater force because it was unsought. Following is the text of the resolution regarding the national food and drugs act:

"Whereas, the enactment of the Federal food and drug law and its enforcement have been of incalculable benefit to the people of this country; and

"Whereas, there is need of strengthening these provisions of the law relating to drugs so as to bring within its reach representations as to curative properties of drugs; therefore be it

"Resolved, that the Illinois Federation of Women's Clubs do heartily approve the purpose and object of the Federal food and drugs act and commend its enforcement as a blessing to the people; and be it further

"Resolved, that we urge upon the President of the United States and Congress the necessity of strengthening those provisions of the law relating to drugs."

The resolutions regarding the state dairy and food laws and the state sanitary law, and the endorsement of the State Food Commission's work is given below:

"The Illinois dairy and food law, passed in 1907, together with more recent amendments, provides for a comprehensive regulation of food products. Adulteration of food products with unwholesome and deleterious substances is forbidden, as well as the substitution of inferior and cheaper ingredients for the genuine article. Manufacturers and producers of food are compelled to truthfully label their goods so that

the purchaser may know what he is buying. In this way the health as well as the pocketbook of the consumer is safeguarded.

"The sanitary food law recently enacted requires that all food must be prepared and handled under sanitary conditions from the time it enters the factory until it reaches the home of the consumer, or the guest at the public restaurant. Adequate provisions are included in both laws for their proper enforcement.

"A large measure of the success that has followed the passage of these laws is due to their faithful and impartial administration by the State Food Commissioner, Hon. A. H. Jones, and his assistants, who are charged with their enforcement.

"These laws are the result of the persistent campaign of education, showing the necessity of such laws, in which work the Illinois Federation of Women's Clubs have performed their full share. It is imperative that this work of education should continue in order that the people may know their full rights in this regard. Therefore be it

"Resolved, by the Illinois Federation of Women's Clubs, that we heartily approve the purpose and object of the Illinois dairy and food law and the sanitary food law, and endorse their provisions as a means of securing wholesome and honest food products. Be it further.

"Resolved, that we approve the administration of the office of Food Commissioner, the Hon. A. H. Jones, and his assistants. Be it further

"Resolved, that we continue the work of educating the people concerning the provisions of these laws, the necessity of their enforcement and the great advantage to be had therefrom."

PROTEST BY RICE MILLERS.

The numerous statements that have been published broadcast, apparently with the stamp of scientific authority, that polished rice is dangerous and the source of disease, have roused the Louisiana and Texas Rice Millers' and Distributors' Association to protest formally against their circulation, and to denounce them as misleading. It is a fact well known to the wholesale trade that one or two wholesale grocery houses in New York have stored large quantities of so-called unpolished rice, and that press-agent work is being resorted to to enable them to market this rice at a good price. The statement of the rice millers sets forth fully the facts in the premises, and we reprint it herewith:

"The trade throughout the United States at present is being largely misled on the question of unpolished rice.

"Some experiments were made, giving rice as an exclusive diet to both chickens and human beings with no other foods of any kind, which resulted in the development of beriberi on rice that had been pounded either by machinery or by hand and the inner cuticle or pericarp removed."

"In Oriental countries the paddy is usually pounded off by hand, and in this process, the pericarp is removed with it, which contains a small amount of protein and fat, the same also being true of the wheat bran. Therefore, if a human being had to subsist on rice alone, this small amount of protein and fat would sustain life better than without it. However, the people in the United States are not confined to one diet, and in eating rice, by the addition of a little meat gravy or butter or consuming a very small portion of meat or fish with same, they more than replace the protein and fat that has been removed by milling. Brown rice is a product unfit for human consumption except among people who have reached that point of starvation that they have one product to live on and nothing else. Brown rice can never become a product of general consumption in the United States, as it not only makes a very unattractive dish in appearance, but does not possess the delicate flavor of the milled article; again, there is enough oil in the pericarp of brown rice to cause it to turn rancid if carried through the summer months.

"Some few states have passed laws prohibiting the sale of polished rice, either through error or ignorance regarding this subject. In the process of milling rice, the only difference being the small addition of glucose and talc in such minute quantities that it could not affect the stomach of a babe two days old. In fact, glucose is a perfectly wholesome food, and the amount of talc used is so extremely small, though same is removed by washing or would be removed by cooking without washing (as water is poured off of rice during the process of cooking), that in our judgment it is farcical to even put this stamp on rice, as the Government fully investigated this matter at one time and considered same a harmless process, otherwise it would not have been allowed, and if we are not mistaken, the Federal courts of Massachusetts have allowed candy to be polished with talc,

that requires a very much larger per cent, and which is consumed by young children and not washed off, as is the case with rice either before or during cooking.

"On account of some scientific experiments, some firms took advantage to introduce and advertise unpolished rice as pure rice, leaving the impression that the polished rice was adulterated. There is no unpolished rice sold in this country today where the pericarp has not been removed to the same extent as the polished. Some leave in a little more of the flour to cover up defects in the rice in many cases, and try to make the trade believe the more floury rice looks in appearance, the better it is. In our judgment, this is simply a case of trying to palm off an inferior article for a superior one, for this flour in the first place is not what is termed the bran or the pericarp; besides, it is loose and just as the rice touches water it is washed off, and rice prepared in this manner does not contain any more protein and fats than the very highest polished rice.

"Rice by itself is largely starch, and, of course, it would be foolish to imagine that a human being could live off of starch alone."

LAND SHOW AT CHICAGO.

The United States Land Show will open in the Chicago Coliseum November 23rd and continue one week. Some of the features will be a camp of real Indians from the Glacier National Park, a sugar-cane mill, Jerry Moore, a fourteen-year-old South Carolina boy, who is the champion corn grower of the world, a Department of Agriculture exhibit and numerous other interesting things. No discrimination in favor of any part of the country will be made. Every section will have an equal opportunity to exploit its own advantages, and exhibits will be shown representing every state from coast to coast. Delegates will be present from chambers of commerce, state universities, civic bodies, and agricultural organizations.

POTATOES DE LUXE.

The biggest single contract ever made for produce from the Twin Falls, Idaho, tract is now being filled, the order calling for forty or fifty cars of fine potatoes. The deal was made between the Twin Falls Potato Growers' Association and R.

Morrill, representing several big produce dealers in Chicago. The potatoes are all to be of the white variety in Eurekas, Rurals, Carmens and Raleighs. They will be graded and each one wrapped and packed in a similar manner to apples. They will range in weight from the minimum, three fourths of a pound, to two and one-half and three pounds, and are for use in the big hotels of the east and on dining cars. Twenty cents per hundredweight above the local market price is being paid for Cobblers and Eurekas the day delivered, and 15 cents for the other varieties.

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SACCHARIN

Extracts from Remsen Board Report of January 13th, 1912.

"1. The findings of the Referee Board, based upon what would seem to be convincing, experimental evidence, are that small quantities of saccharin, up to 0.3 gram per day, are without deleterious or poisonous action and are not injurious to health. This being so, it would seemingly follow that foods to which small quantities of saccharin have been added—in amounts insufficient to result in a daily intake of more than 0.3 gram—cannot be considered as adulterated, since foods so treated do not contain any added deleterious ingredient which may render the said food injurious to health.

"Admitting that large quantities of saccharin—over 0.3 gram per day—taken for long periods of time may impair digestion, such evidence cannot consistently be accepted as an argument in favor of the view that smaller quantities must constitute a menace to health. It is often claimed that any substance having a deleterious effect on health when taken in large amount, must necessarily be injurious even when consumed in very small quantities, and that it is dangerous to differentiate on the basis of quantity. There is, however, no justification for such a view from a physiological standpoint. Common custom, for example, sanctions the free use of vinegar or dilute acetic acid as a preservative; yet it is well known that in larger quantity acetic acid is a dangerous substance. Common salt, while harmless when taken in small quantities, may become a serious menace to health if taken in larger quantities. The hydrochloric acid of the gastric juice is not only harmless but is essential for the welfare of the body, yet when its concentration is increased beyond a certain point it becomes a poison. It is evident, therefore, that the decision as to whether a certain substance is or is not injurious to health must take into account the quantity of the substance that is involved. The Referee Board is compelled, on the basis of the experimental evidence, to hold to the view that the addition of *small* quantities of saccharin to food does not constitute an adulteration, since there is no evidence that small quantities of the substance are deleterious to the health of normal adults.

"2. The *addition* of saccharin to foods, in large or small quantities, does not, so far as the findings of the Referee Board show, affect in any way the quality or strength of the food"; and further: "In the opinion of the Referee Board the use of saccharin in food in quantities that might constitute a menace to health is improbable, since its extreme sweetness would naturally limit its consumption by the individual to amounts below what might prove injurious (in harmony with the conclusions expressed in the original report of the Board)."

According to the statistics in the Department of Agriculture as to the total consumption of sugar in the United States, it is apparent that if all the sugar consumed in the United States for all purposes should be instantly displaced with saccharin, the daily per capita consumption would be much less than 0.3 gram.

Thousands of people whose doctors advise them against the use of sugar, also using saccharin, for health, or to avoid the diseases incident to the use of excessive quantities of sugar.

MONSANTO CHEMICAL WORKS, *Manufacturers of* SACCHARIN, St. Louis

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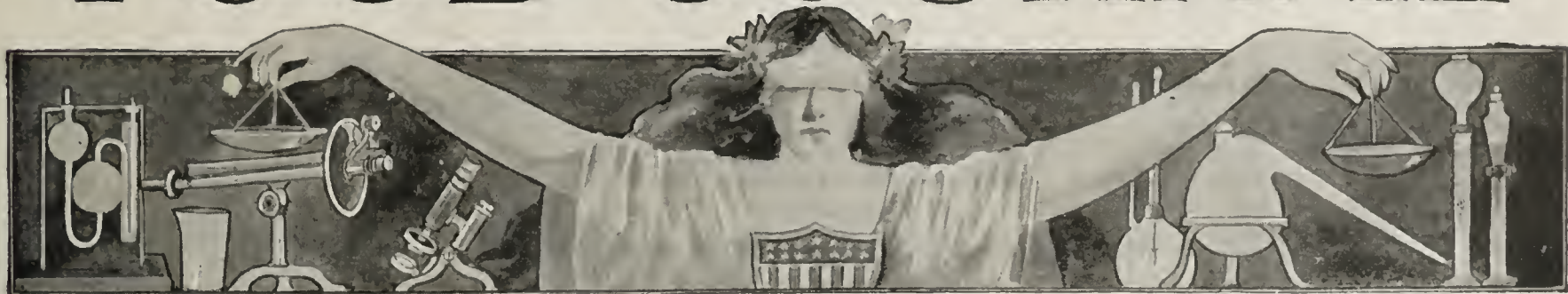
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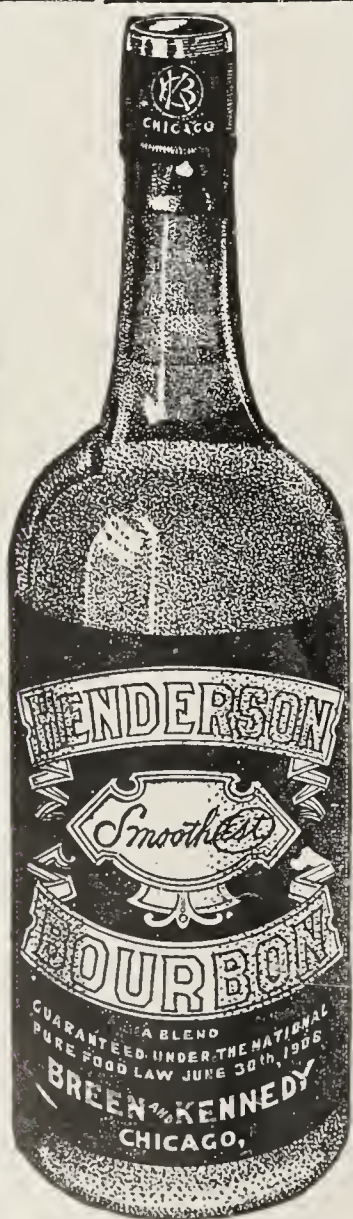
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A Word About Terpeneless Extracts

By Robert Emmet Wood.

THE experiments of Pawlow have shown the importance to digestion of an agreeable taste and flavor in food. He shows that when food is palatable and of a desirable flavor peristaltic activity in the digestive tract is set up even before the food enters the stomach. A nice adjustment of carbohydrates, proteids and fats is not alone necessary for perfect digestion and the proper sustenance of life. Food must be appetizing as well as nourishing. It must be attractive to the olfactories, otherwise it will only be eaten with hesitancy, and any repugnance it provokes must have its result in the failure of the digestive organs properly to perform their functions.

It is important also that food should possess an inviting appearance to the eye, which is frequently the first judge of its desirability. This is particularly true of confections and the lighter parts of the menu. How often has a jaded appetite been stimulated by the appearance on the board of a punch, first of all attractively colored a beautiful green or pink, and then, as it approached the nose, giving off an admirable flavor, finally so appealing to the tongue with its combination of sweetness, coldness and flavor as to make it irresistible?

And bearing upon the question of flavor in foods, how many persons realize that it is only through the olfactory nerve that the impression of flavor is gained? The tongue has long been given credit for doing more than its share of the work of conveying pleasant gustatory sensations to the brain. The tongue really gets only a limited number of impressions, but we have long been misled into a belief that it gets nearly all the sensations of flavor or divides them equally with the olfactories. A recent writer in the *Century Magazine*, Henry T. Finck, has stated the facts in regard to the relative functions of the tongue

and the olfactories, and sets them forth in the following language:

"The king of German philosophers, Kant, who was an epicure, maintained that smell is the least important of our senses, and that it is not worth while to cultivate it. Nay, the king of epicures, Brillat-Savarin, wrote a famous book the very title of which, *Physiology of Taste*, is a scientific blunder. Like everybody else, he believed in the existence of an infinite variety of tastes, and never suspected that, *with the exception of sweet, sour, salt and bitter, all our countless gastronomic delights come to us through the sense of smell*. The French physiologist Longet and the German anatomist Henle were so far as I can find, the only experts who had an inkling of the gastronomic importance of the sense of smell; but they did not go so far as to formulate the theory I have just expressed in italics. My experiments (performed some years ago in Germany) showed me that not only is it impossible, with the nose clasped (or closed by a cold), to tell the difference between various kinds of meats, or cheeses, or cakes, or vegetables, but also that even in the case of sweet and sour substances which do gratify the taste, the sense of smell is much more important than the taste.

"Why is it, for example, that we are willing to pay from five to fifteen times as much for candy as for plain sugar? Because the sugar appeals only to the taste, whereas the candy is usually perfumed with the aroma of sarsaparilla, wintergreen, vanilla, chocolate, and a hundred other flavoring ingredients, the fragrance of which we enjoy by exhaling through the nose while eating it.

"The emphasis lies on the word *exhaling*. It is considered a breach of etiquette to smell of things at the table in the ordinary way, because it implies a doubt

as to the freshness of the food. But there is a second way of smelling of which most persons are unconscious, although they practice it daily.

"Anatomy shows that only a small portion of the mucous membrane which lines the nostrils is the seat of the endings of the nerves of smell. In ordinary expiration the air does not touch this olfactory region. But when we eat in the right way we unconsciously guide the air, impregnated with the flavors of the food we are munching, into that region, and that is the way we enjoy our food. We do this unconsciously, I say; but now try and do it consciously, guiding the expired air very slowly through the nose, and your enjoyment of a meal will be quintupled.

"Obviously Kant made the mistake of his life when he said that the sense of smell was not worth cultivating. It not only provides us with additional table pleasures, the hygienic and tonic value of which has been sufficiently dwelt upon, but it is a fact of unspeakable importance that the more we educate the nose, the more discriminating we make it, and the more stubbornly therefore we insist on having wholesome food only."

The importance of the element of flavor in food has been recognized by scientists and lately by the food law. Circular No. 19 of the Department of Agriculture erected some standards that were supposed to represent the last word of perspicacity on the subject of flavoring extracts, such as vanilla, orange, lemon, etc., all used in food for flavoring purposes. It was the intent of the gentlemen who framed the standards to so fix the essential elements of flavor as to make an extract conforming to any one standard a perfect and true example of that particular extract so far as flavoring power went.

It is not the intention of the present writer to suggest that these gentlemen have been misled into making some more or less egregious errors by their zeal or by their ignorance, for it must be understood that they were selected for the duty of erecting certain standards because their information was reckoned to be very complete on the subject, and their zeal must be regarded as a foregone concomitant of their labors. Their knowledge was indeed as complete as is to be found generally in official circles (and we must not here overlook the complaint that has been made of the failure of the men of the Bureau of Chemistry to accomplish any great results in research chemistry, or even to attempt any work along that line). Occasionally we find men in state departments, like Willard of Kansas, who are doing practical work and getting results that may be classed as research work, but for the most part official chemists only accept the obvious and use the results of work that can best be described as conservative in the making up of data upon which to set up standards. This may explain why Circular No. 19 does not show any progressive spirit in defining terpeneless extract of lemon. The limitations of chemistry seem here to be as proscribed and as rigid as the rules of law. Of the thirty or more esters, aldehydes and other bodies that constitute the actual volatile essence of the fruit there is no recognition other than the requirement as to citral content. Just here the analytical chemist will throw up his hands: "How can such standards be established," he will ask, "and how can we measure things that we have not yet isolated?" True, how can it be done, but on the other hand, why do the obviously wrong thing and insist on the terpenes, or the oil-and-alcohol ex-

tract, merely because the right things cannot be done? The question goes back to fundamentals. We solve it, as we customarily solve other things, because we think the question demands a solution. We have long been accustomed to the very palpable truth that human nature cannot be changed by legislation, but that has never yet kept our legislators from bringing in bills with that very object in view, however great their futility. And the fact that so great a discovery as the terpeneless extracts of citrus fruits has never been adequately covered by a standard has not prevented the chemist-in-office from establishing for it standards that meet only the limitations of his inadequate information.

And for the present we may accept the fact that knowledge upon which to base a comprehensive and intelligent standard for terpeneless lemon and orange extracts has not yet been gained. The balance-and-burette method of determining so evanescent a matter as the volatile essence that gives the true fruit flavor to a lemon extract has not yet been created. To the layman this is a puzzle, for he knows that certain ethers can be combined so as to simulate closely a wide variety of fruit flavors, and in the case of those fruits having no essential oil to hold the flavors, this process is an absolute necessity to the production of essences and extracts at a cost within reason. The labeling of such products "imitation" and "artificial" is only a part of the process of production, having no relation to their purity or flavoring value. The lay observer then—the ultimate consumer—reading the label and observing that the product smells natural and flavors his food satisfactorily, and understanding something of the synthetic production of essences and extracts, may wonder at times why the same physical test he applies to the article he purchases and consumes is not at the command of the chemist-in-office. It is, only the balance-and-burette method presents more solidity to his mind. He knows that the results he gets are measured with a fair degree of accuracy. What his balance and burette do not measure he admits may exist, but he banishes them to the realm of the unknown, and chaos is as abhorrent to the chemist-in-office as a vacuum to nature. Outer darkness—"the circumambient realms of nothingness and night"—press in on the official mind at times and produce what would be regarded in other circumstances as a panic. Panic gives rise to obsessions, and we have examples of the afflicted giving utterance to such sentiments as were expressed by a former Food Commissioner of Colorado before the Association of State and National Food and Dairy Department in convention at New Orleans in December of 1910, as follows:

"Terpeneless lemon and orange permitted in certain cases in circular 19 issued by the Department of Agriculture opens the door wide to the same class of miserable adulteration that existed prior to the enactment of the law. Of course the argument is that such terpeneless extracts should contain not less than 0.2 per cent by weight of citral derived from oil of lemon. The same percentage of citral derived from lemon grass has been successfully substituted therefor. Traveling salesmen have been reported as offering terpeneless lemon extract for sale on the ground that it was a very superior production which would not be so labeled unless in conformity with the pure food and drugs act. Could a more absurd definition be given for terpeneless extract of lemon than that found in

Circular 19, where it says it is prepared by shaking oil of lemon with dilute alcohol, the very method used by manufacturers heretofore for selling the lowest grade of citrous extracts upon the market. In Colorado we have taken the stand that any flavoring extract made from essential oils containing less than the Government standard of oil shall be labeled 'adulterated,' and if colored, 'artificially colored.' They can not be called imitation lemon for you can not any more imitate lemon by adding water to the menstruum than you can by adding water to milk and call it an imitation. Where an extract of lemon is made from citral derived from lemon grass or from other sources with no oil of lemon, it might be called an imitation lemon, but under no conditions could it be properly called a compound or blend."

This is panic pure and simple. It is the same viewpoint that induced a former commissioner in Michigan to begin a prosecution that ended in a notable allocation of the Supreme Court of that state, part of which is presented herewith:

"Now, if it be a fact, as the testimony on the part of the respondent tends to show, that it is a positive advantage to exclude the terpene wholly from the extract and to lessen the quantity of alcohol used, then the essential ingredients of lemon extract have not had substituted for them anything inferior or cheaper. We are aware that this view of the law may make it more difficult to establish the individual case, but as the statute is a penal statute it should receive a strict construction. It follows from the views above expressed that the instruction of the learned Circuit judge was erroneous inasmuch as the jury were told in effect that if any ingredient of lemon essence as defined by the pharmacopœia was wanting in this extract sold by the respondent that there should be a conviction. We think the instruction should have been that if the lemon extract sold by respondent contained all the ingredients and in quantities such as prescribed by the pharmacopœia *which are adapted to use as food*, and that nothing was eliminated except such ingredients as could be dispensed with without injury to the product as a food product, there was no violation of the statute."

The italics in the foregoing paragraph are used to direct attention to the argument to be elaborated herein, that flavors are not food in the sense that they furnish nutrition, but the Federal food and drugs act is so drawn as to include flavoring materials in the food class. The less of any added flavoring material actually consumed, however, the better for the consumer. Flavor is only to add attractiveness to food, not to nourish. Some months ago in a case before the courts of Pennsylvania the point was raised by the attorneys for the defense that a prohibition of the use of a certain substance in foods did not apply to candy because candy was not specifically mentioned in the act. The point raised is worth considering in connection with flavoring materials, which may only be defined as foods and brought within the scope of food legislation by a specific law. The extreme volatility of flavors and the need that they possess distinctive characteristics place them outside the classification of foods or give them a special division in that class—one of brevet, let us say. The reader will readily see that the best flavor is that which is most readily miscible with food products—provided it is strong and true as well. But stability and the power of imparting the true fruit flavor in the highest degree

will be recognized as important qualities in flavoring material.

To apply the layman's test of smell and the physical test of results in actual use to the terpeneless extracts of citrus fruits and formulate upon those tests a scientific standard has not been found expedient, however much that course might appeal to common sense. But the present standard is inadequate as shown by the disappearance of citral in the lemon extract labeled "six times standard strength." To say that the alleged strength was not present, otherwise than as judged by the citral content standard, is an impossibility. So the appeal to the commonplace standard of smell and results in use will seem more sensible than to rely upon the standard of the chemist-in-office based on balance-and-burette determinations.

In the case of oil of lemon as in other essential oils, the aromatic oxygenated constituents—aldehyde and esters—are the flavor.

Many essential oils are now valued by their ester content. Careful experiments conducted in France have demonstrated the progressive development and increase of esters and consequent improvement in quality of essential oils in the natural process of oxidation attendant upon the ripening of the various essential oil-bearing plants experimented upon.

The terpenes of oil of lemon which make up its chief bulk are merely the vehicle of the flavor as it exists in the rind of the fruit. These terpenes are not themselves odorous and are not readily miscible with the starches, sugars and aqueous mixtures of which vegetable food products consist.

Besides insolubility the terpenes have the further disadvantage they readily absorb oxygen and in doing so take on a terebinthinate odor, becoming viscid and finally completely resinified.

For this reason neither oil of lemon nor its alcoholic solution is stable in agreeable flavor.

Since the flavor value of citrous oils resides in its oxygenated constituents which as we have seen increase with the natural oxidation to which they are subject, the problem in making a fine citrous extract is to eliminate the terpenes without injuriously affecting the oxygenated odorous constituents of the oil.

There are two methods of eliminating the terpenes. One of these is the process of mechanical agitation with a solvent suitable for dissolving only the odorous, oxygenated constituents and having but little solvent action on the terpenes.

This process has the merit of retaining unchanged in the extract the fine aroma of the fresh fruit and, when intelligently followed, exhausts the oil of practically its entire flavoring content. This has been repeatedly shown to be true by estimating the citral content of (a) the citrous oil taken for preparing the terpeneless extract, (b) the finished washing or extract (c) the eliminated oil. Hardly a trace of citral remains in the well washed oil and the bland taste and flavor of the by-product indicate that its original complex blend of esters has also been removed by the mechanical agitation.

This result might naturally be looked for since the esters which so largely fix the flavor value of the oil are organic salts more soluble in dilute alcohol (mixed alcohol and water) than citral, a difficultly soluble aldehyde.

Colorimetric tests for citral shows that not all the citral washed by the agitation process from the oil ap-

pears as citral in the extract. It appears probable that a portion of the citral continues the natural oxidation process and enters into combination, increasing the ester content and the flavoring value of the extract.

Consecutive estimates of terpeneless extract of lemon prepared by agitation show steadily diminishing citral content and increasing content of esters.

In such cases as in the analogous case of the ageing of liquors, the ripening of the extract results in actual improvement in flavor, not in deterioration, with the progressive decrease in citral as shown by methods of estimation in use.

Because of the difficulty experienced by most workers in really exhausting the oil of its flavor by the process of mechanical agitation and because the citral content of the extract, for reasons stated is likely to disappoint, it is now customary to prepare a terpeneless so-called extract by dissolving in dilute alcohol a terpeneless oil of known percentage of citral.

This process, now authorized, makes an extract which, at least when first prepared, may be of any desired citral content and so may pass into interstate commerce without fear of seizure for violation of law.

However, the sole purpose of a flavoring extract being to impart its agreeable flavor and to add zest to a food product, that extract is best which best serves this purpose.

Oil of lemon is classed as a volatile oil but it is really a very complex natural mixture of non-volatile constituents with volatile terpenes, sesqui-terpenes, aldehydes and esters volatilizable at varying temperatures. While these are in the main separable by fractional distillation, it has not been found possible even by the most careful distillation in vacuo to make the separation without some destructive distillation and decomposition. The product of destructive distillation is tar. In so far as tar is produced in the making of a terpeneless oil, the flavor value of the oil is diminished.

Arbitrary tests requiring a certain percentage of citral in terpeneless extracts laying claim to extra strength and quality, such tests having been established by authority and sustained by decisions of courts have had the effect of subjecting to unjust penalty and undeserved censure the choicest genuine terpeneless extracts offered to the trade, making it unlawful for the makers to claim upon their labels the actual strength of flavor which the extracts possess because by the process of mechanical agitation employed a portion of the citral known to be removed from the oil does not appear as citral in the completed extract.

The cost of standardizing a terpeneless extract of lemon for the purpose of seeming to comply with arbitrarily erected standards by the addition of citral from any source would be practically nothing since citral is a large constituent of several low priced essential oils but these pioneer makers of pure, concentrated terpeneless citrus extracts prefer to abate upon their labels their claims of strength as determined by citral percentage and to continue to offer only the natural fruit product not artificially fortified nor impaired in aroma by the employing of terpeneless oils, being confident that the best flavor isolated by mechanical means only from everything that would impair its usefulness, freely miscible and imparting its characteristic aroma when one part of it is blended with four thousand parts of water or with a food product is not likely to be supplanted in the flavor, in which it is now held by food products manufac-

turers, by inferior substitutes of whatever citral strength.

The question of fraud having been raised in connection with this product, it may be well to admit that the first terpeneless extract may have been the outcome of the experiment of some peddler in adding water to his extract and trying to make a good job of it by shaking it violently. Perhaps to his annoyance part of the oil separated and rose to the top of the container, and to conceal the addition of water he was obliged to pour it off. Probably no suspicion that he had made a scientific discovery entered his mind. Like many other scientific discoveries put to a bad use the odium of the underlying unworthy motive of the original experiment has clung to the process and made it difficult for the legitimate manufacturer of terpeneless extracts to market his product, and actually impossible in some states.

PROTEST WILEY FOR CABINET POSITION.

The United States Department of Agriculture is one of the biggest and most important features of the country's activities under official direction. There is no individual who is not interested in some degree in the manner in which the department is conducted, so closely and intimately do those matters under its jurisdiction come to the whole people. These statements are so well recognized as to need no argument in their support. Who will be our next Secretary of Agriculture is a question that is interesting actively at the present time vastly more individuals, business people and organizations, than any other single feature of speculation in regard to the make-up of the next cabinet of the President of the United States.

Numerous press reports have been published suggesting that Dr. Wiley, formerly chief of the Bureau of Chemistry of the Department of Agriculture, would probably be appointed to that important position. Many people seem to be taking the report seriously, and protests are being made to President-elect Wilson against such an appointment.

The executive committee of the National Association of Retail Druggists held a meeting in Chicago, December 6, and adopted the following resolutions of protest against the appointment of Dr. Wiley as Secretary of Agriculture:

"Whereas, The impression prevails that President-elect Wilson has under consideration the appointment of Dr. Harvey W. Wiley as Secretary of Agriculture, and,

"Whereas, We believe the appointment of Dr. Wiley would not be in the interest of nor to the advantage of agriculture, nor of the public at large, including 43,000 retail druggists whom we represent, because of his not being a practical farmer and his unfairness to the drug interests of the United States; and

"Whereas, The Bureau of Chemistry under the administration of Dr. Wiley, while efficient in many respects, was characterized by arbitrary action detrimental to legitimate drug and other business, be it therefore

"Resolved, That we protest against the appointment of Dr. Harvey W. Wiley as Secretary of Agriculture as being fraught with danger, subversive of justice and progress among our people and inconsistent with careful, sane and just administration of important executive function, and be it further

"Resolved, That, while unalterably opposed to the appointment of Dr. Wiley as Secretary of Agriculture or to his reinstatement as chief of the Bureau of Chemistry, this committee desires to go on record in favor of the pure food and drug acts and rigid enforcement of the same."

What Happens to Cream.

"In our country, where can one really find the cream of society?" asked Miss Blase.

"In Reno, of course, where society goes through the separator," replied the cynic acridly.—*Times-Star*.

Saving Time.

"I see you are carrying home a new kind of breakfast food," remarked the first commuter.

"Yes," said the second commuter. "I was missing too many trains. The old brand required three seconds to prepare. You can mix up this new kind in a second and a half."—*Louisville Courier-Journal*.

Our Washington Letter

By Our Staff Correspondent.

WASHINGTON, D. C., December 12, 1912.—Only the grace of God and a stout Presbyterian heart, the latter fully supplied with hatred for pious frauds, will save President Wilson from a re-opening of all the questions arising under the food and drugs act that perplexed Presidents Taft and Roosevelt. All the wind-jamming near-scientists who have been saving weak women and defenseless children at so much per yawp instead of performing scientific work, which they probably could not, are milling around and making all the motions of war they know about.

Their numbers alone is sufficient, if there is any weakness in the incoming President, to cause the whole subject to light up again into acute form, like a recurrence of inflammatory rheumatism. All the busy little press agents and the men employed to get information are again whispering mysteriously about the influence they will have with the incoming administration.

Dr. Wiley has kept in touch with the cable office, but thus far there has been no call for him to come to Bermuda. In fact, no one has received any calls from the place where Dr. Wilson is taking a rest and, incidentally giving the correspondents of the press associations "steers" that enable them to write stuff indicating that he has a level head and has no thought of giving its keeping into the possession of any one man.

It is a fair inference that whatever is coming from Bermuda is inspired by the President-elect. There is not a line in any of either Press Association or special correspondent writings that gives ground for any inference other than that the next President will be one of the best balanced men ever in the White House. It is inconceivable that it would be possible for the Wiley people to ever get his ear to such extent that he could lose sight of the fundamental purpose of the food and drugs act—that of forbidding the use of positively deleterious substances, the substitution of concededly inferior for superior articles of drug and diet and the elimination of false and misleading statements on the labels.

Thus far he has shown every indication of being perfectly able to take side-step false premise questions that may be put up to him. He has had too much to do with the writing of history to be fooled by conflicting evidence such as was put in in the benzoate of soda controversy, if it is not too much of a strain upon courtesy to call the notes of the Wiley investigation evidence. He knows that the charge that benzoate is deleterious is destroyed by the mere fact that the evidence taken is in conflict. And when I use that word "conflict" I use it in the strict legal sense, namely that the evidence so nearly balances that a reasonable man cannot come to a conclusion as to what is the truth. Of course that is for mere forensic purposes. As a matter of fact that evidence is overwhelmingly in favor of that preservative being less harmful than many of the so-called "natural preservatives," but that it is bearing the same burden that every other beneficial advance has been forced to bear; it is the same sort of burden that is being cast upon serum treatments for acute infections caused by the pus group of germs, by the general practitioners who read of Wright's negative phase troubles in using tuberculin on human beings, and then stopped reading fully convinced that diseases will have to be "cured" in the old way with drugs, instead of by the use of sera.

Dr. Wilson thus far has shown that he is not likely to be led by men of the Wiley school, the one which would forbid any advance in the preparation of either foodstuffs or substances for the healing or alleviation of suffering from diseases.

Half-baked scientists, the kind that argue that if a given substance, say for instance caffeine, is harmful when taken pure and in comparatively large doses, it must be harmful even in small quantities, are likely to get cold cheer at the White House after March 4, unless every method for judging a man goes wrong when applied to Woodrow Wilson.

Yet all the interests that failed to get their reactionary views adopted by the Secretary of Agriculture, and incorporated in food and drug decisions, are doing what they can to stir up the old fights. They mean to carry their troubles to the White House as a proper beginning. They may realize that possibly the new Secretary of Agriculture is the man to

properly be applied to first and go through the form of making their application to him, but if they do they will expect President Wilson to take note of their going and see to it that the Secretary of Agriculture makes the "right" decision.

A "righteous decision" so far as they are concerned, would be a reversal of the whiskey and benzoate decisions. Dr. Wilson probably knows little or nothing about the whiskey matter. The so-called straight interest is very powerful in a financial way. It is conceivable that he might be misled into some step in that matter that would be helpful to the stock of the big corporation that controls most of the distilleries that produce and market "straight" whiskey. It is unthinkable, however, that he could be misled with regard to benzoate. The men who made the decision with regard to that are of his own class as educators. Dr. Wiley is not and never was in their class.

Now here are some political considerations to be remembered in connection with this matter: The head and front of the benzoate fight in a large advertiser, without political power except such as has come to the campaign he has been making because of the platitudinous Wiley talk about championing the cause of weak women and defenseless children. He is the financial backer of the Wiley propaganda.

Dr. Wiley is employed by William Randolph Hearst. Remember the part Hearst played at the Baltimore convention that named Wilson? Why, he championed Champ Clark to the last minute. In the ante convention fight he attacked Wilson right and left. At 1 o'clock of the morning of the day when Woodrow Wilson was nominated Hearst made a dramatic exit from Baltimore. With majestic but dejected stride he led a party composed of his wife, servants and one male stenographer, in single file through the Union station to a train. He marched with his wide brimmed hat pulled well down over his eyes, and hands thrust deep into the pockets of a big raincoat in such a way as to bring to mind nothing less than the "retreat from Moscow," although likening Hearst to the Corsican may be a bit grotesque.

As to whiskey, the impression has been created by those who made the losing fight that they were fighting to keep the standard of Kentucky's best as the standard for the United States. That might, in these circumstances, seem to be a great help except for the fact that Ollie James, soon to be senator from Kentucky, was permanent chairman of the Baltimore convention, a fact that might have given him a high standing with the incoming administration but for the fact that he used his office for a most villainous piece of stumping in behalf of a particular candidate ever made in a national convention.

When Champ Clark received a majority of the votes, but not the two-thirds needed in a Democratic convention, James announced the fact and sneeringly added that he was sorry that such a rule prevailed to govern in a party that believes in the rule of the majority, for Champ Clark was obviously the choice of a majority of the Democrats of the land.

But the "straight" whiskey faction is not Kentuckian. Mr. Edson Bradley, who owns a house here that covers more ground than that of any other, is at the head of that faction and he is not dependent upon James or any other Kentucky politician.

A New Health Drink.

A new health drink, known as fermented milk, is being prepared and sold by the dairy department of the College of Agriculture, Ohio State University. A bacteria, called *bacillus bulgaricus*, is the active principle in this milk, which acts as an intestinal disinfectant and helps to keep the body healthy. Other bacteria cannot live in the presence of this germ, which was discovered and named by Dr. Metchnikoff, the famous scientist, says the *Milk Reporter*.

In preparing fermented milk one part of the culture of *bacillus bulgaricus* and one part of the ordinary lactic acid culture are added to two parts of sterilized skimmilk. Enough pasteurized sweet cream to make the mixture contain two per cent butterfat is then put in and the whole churned about five minutes to mix thoroughly. It is then put up in fancy bottles and placed on market. This milk does not whey off and the longer it stands at the proper temperature the better it gets.

Household Science and the Table

THE CHRISTMAS FEAST.

By Elenora Elizabeth Reber.

The observance of Christmas as a religious ceremony dates back not far from the birth of the Saviour. At first its significance was entirely of a religious nature, but gradually the feast features of the day came into greater prominence, and for several centuries the celebration was not confined to a day, but continued over several days, ending on Twelfth Night. Accounts of the Christmas dinners and celebrations of three or four hundred years ago read like fiction to us of the present day. We are informed that the custom of serving the boar's head with minstrelsy at the Christmas dinner with much ceremony was very general in England previous to the civil wars of the seventeenth century. Some of the feasts were grand indeed, the servitors bringing in the boar's head dressed with holly and rosemary, while the whole boar and boar's head, gorgeously ornamented, gilded and painted, was also a favorite festival dish in England during the Norman era.

The Christmas banquet of those days would have been incomplete also without the Christmas pie, which was quite a wonderful concoction. This Christmas pie, we are told, was quite a bill of fare in itself. Indeed, fish, flesh and fowl were to be found beneath its ample crust. We read that on one occasion Henry III ordered the sheriff of Gloucester to procure twenty salmon to put into pie at Christmas, while the sheriff of Sussex was asked to bring ten brawns, ten peacocks and other items for the same purpose.

The peacock was only produced at solemn and chivalric banquets, such as that of Christmas, and was served up with gilded beak and plumed crest, his head appearing at one end of the pie, and his tail at the other, spread out in all his glory, and carried in state into the hall to the sound of minstrelsy by the lady most distinguished for birth and beauty, the other ladies following in due order.

Many elaborate banquets are served on Christmas Day in our own time, but the vast majority of American homes will have an appetizing feast simply served, with probably a turkey as the piece de resistance.

A dinner to be heartily enjoyed must be attractively served. The menu for the Christmas feast having been planned and the viands prepared, the setting of the table must be considered, and to be really effective there must be a well thought-out scheme, the result of which will be apparent when the decorations are placed and the silver and dishes are arranged.

In the home where the Christmas dinner is a family feast with good cheer and wholesome food, and guests, if there be any, are two or three intimate friends, simplicity should be the keynote of the table decoration. A centerpiece built high so as to obstruct the view across the table is always an aggravation to a company of lively people who wish to interchange conversation with all who are seated at the table. Low decorations are more appropriate and can be made just as beautiful. The illustration given here shows a flower centerpiece with chrysanthemums, and holly wreaths are placed at the base of the flowers, a sprig of holly being placed on each plate.

The English do not consider their Christmas dinner complete without its plum pudding. So tenaciously do they cling to the custom of serving it that they take it with them to

foreign lands and thus have established it in other countries. But to really seem like the real thing to an Englishman away from his native land, the pudding must be baked in Great Britain, even if it is necessary to ship it a very long distance to be served. Tons of plum puddings are shipped across seas from England to the United States and Canada, and other of the English colonial possessions, ready for the Christmas feast.

In fact, today the production of plum pudding in England by machinery is an important industry. The use of machinery in making the product, it is stated, has improved the quality, the digestibility, and reduced the cost of the pudding, all of which features are much to be commended. Most of these plum pudding factories are located in London. The industry was given a great boon during the time of the Boer war. In the opening days of that struggle the Yuletide season increased the natural solicitude of those at home for the fathers, sons and husbands in far away Africa, and the plum pudding was requisitioned in large quantities to express the feeling at home and carry a spark of Christmas cheer to enliven the soldiers' camp.

In order to have these puddings reach their destination in time for Christmas it is necessary for the manufacturers to begin operations as soon as the new crops of raisins, currants and other required fruits appear in the market. When

pudding making begins the factory presents a busy scene. Currants are washed and stems removed; raisins are stoned; nuts are shelled and ground; oranges and lemons are peeled, the peel candied and cut up; eggs are beaten, and all other ingredients are prepared by machinery. An idea of the quantity of puddings which some of these factories make may be gained from the following list of materials with quantities utilized in one of them during a past season: Currants, 145,800 pounds; sugar, 101,250 pounds; orange and lemon peel, 72,360 pounds; suet, 72,360 pounds; bread

crumbs, 72,360 pounds; flour, 54,000 pounds; raisins, 48,330 pounds; Sultanas, 48,330 pounds; China ginger, 3,510 pounds; spices, 1,440 pounds; almonds, 400 pounds; milk, 948 gallons; rum, 948 gallons. The authority for the above figures states that from this amount of ingredients 250,000 puddings were made.

The puddings are put up in packages weighing one to five pounds each and securely packed to insure preservation and safe transportation. Properly prepared and packed the plum pudding of England, with ordinary care on the part of the housewife, it is claimed will retain its virtues for a year or more. We doubt if any recipient of one of these puddings in the United States ever kept one of them long enough to test its utmost keeping qualities!

FRENCH CHRISTMAS PUDDING.

The French way of making Christmas pudding is quite different from that of the English, but for all that the following recipe, which is popular in France, gives excellent results:

Boil up in a clean stewpan a half pint of milk with two ounces of butter, and stir in gradually four ounces of sifted flour. Continue to stir over the fire vigorously with a wooden spoon until a smooth paste is obtained. Allow this to cool then add three ounces of castor sugar, the yolks of six eggs, and the whites of four eggs well whisked. Peel and core three medium sized cooking apples and slice and chop them, then pour over a glass of Kirschwasser; add two ounces of



CHRISTMAS TABLE WITH CHRYSANTHEMUM AND HOLLY DECORATIONS.

ground almonds or walnuts, one-fourth pound of cleaned Sultanas, and one-half pound of seeded raisins, also one heaped teaspoonful of ground cinnamon. Mix the ingredients together gently and steam in buttered molds for about two hours. Serve with vanilla sauce.

A PLUM PUDDING VARIATION.

A Massachusetts housewife vouches for the excellence of the following plum pudding recipe: Take one-half pound of flour, one-half pound of raisins, one-half pound of currants, one-fourth pound of chopped suet, one-fourth pound of brown sugar, one-fourth pound each of mashed carrot and potato, one ounce of candied lemon peel, a small amount of molasses, and an ounce of citron. Mix the flour, currants, suet, raisins, peel and sugar well together, stir in the mashed carrot and potato, and add the molasses. Put no liquid into this mixture else it will be spoiled. Put into a pudding mold and boil or steam for four hours. Serve with brandy sauce. This pudding is better if the mixture is allowed to stand over night before cooking.

PORK CAKE.

From the same source comes the following Christmas cake recipe: Put one cupful of salt port through a meat grinder, using a fine cutter. Pour over this one cupful of hot water. Stir well to blend, then add two cupfuls of molasses. Dissolve two teaspoonfuls of soda in a little water, add one-half teaspoonful each of allspice, nutmeg, cloves and cinnamon. Add one cupful of raisins and one cupful of currants, or any fruit you may prefer. Add about four cupfuls of flour. Bake and frost sides and top.

YULE CAKE.

This recipe for cake is given as an appetizing one that will be relished as a part of the Christmas feast: Take one cupful of butter creamed with one cupful of sugar, add one-half nutmeg grated, one-half pound seeded and chopped raisins, the grated peel of one orange, one cupful of sour milk, three and one-half cupfuls of graham flour, one level teaspoonful of soda dissolved in one tablespoonful of hot water. Bake in a loaf and when cold ice with chocolate and ornament with blanched almonds and white icing put through a fluting tube.

CHICKEN SOUP WITH OYSTERS.

A soup that is a little different from ordinary and which makes a fine soup for the Christmas dinner is as follows: Have three pints of liquor in which a fowl has been boiled, add to it the liquor from a quart of oysters that have been lightly blanched in their own liquor; boil for fifteen minutes, seasoning with pepper and salt and a little onion juice added for flavoring. Fry till brown in butter some dice shaped bits of chicken, about half a cupful of them, and put these with the oysters into the soup to cook for two minutes before serving. Do not cook longer than is necessary to have the oysters curl about the edges.

FRIED OYSTER PATTIES.

Another oyster dish which may be part of the Christmas feast is made as follows: Make some good rich paste and roll out and cut into rounds. Blanch the oysters, let them become cold, chop them a very little, season with pepper and salt, add to them a little cream, and spread this mixture on the rounds of the crust. Fold each round over, pinching the edges tightly together, dip into beaten egg, drop into boiling fat, and serve very hot, garnished with sliced lemon. To the chopped oysters for this dish many things may be added; a bit of bacon or the juice of an onion, or any flavor desired may be introduced.

CHRISTMAS CANDIES.

Christmas would not be complete in many homes where there are children did it not include making some home-made candies. Here are three recipes which will give delicious results:

CHOCOLATE CREAMS.

Put two cupfuls of granulated sugar with half cupful of cream and boil them together for five minutes. The time must be counted from the moment the mixture begins to boil, not from the instant it is set over the fire. After taking from the fire, flavor instantly with a teaspoonful of vanilla, and then set the vessel in cold water, stirring contents continually until stiff. When sufficiently solid drop the cream from the end of a spoon on waxed paper, and as soon as it is cool enough mold into balls. Meanwhile dissolve a cake of chocolate in an earthenware or enameled vessel set in boiling water. When the chocolate is liquid, roll the cream balls in it, lift them out with a wire fork and lay them on the waxed paper to harden.

MOLASSES CHOCOLATE CHIPS.

Take one quart of molasses, half a cupful of white sugar, an even cupful of grated chocolate, half a cup of vinegar, a tablespoonful of butter, one teaspoonful of baking soda. Pour the vinegar upon the grated chocolate and the sugar and let it stand at the side of the range, where it will dissolve slowly. It should not get hot. When the sugar is melted turn into the molasses and cook, without cover, stirring from the bottom often until it spins a thread from the top of a spoon. Now stir in the butter and the soda, the latter dissolved in hot water. Flavor with vanilla to taste and pour out upon buttered platters to harden. As it forms, cut into chips or bars with a buttered knife.

PRALINES.

Pralines are a most toothsome confection, and here is the recipe for making them: Four cups of light brown sugar, one of milk, juice and grated rind of one orange, two-thirds cup of walnut meats, tablespoon of butter and a pinch of salt. Cook until soft ball is formed in cold water. Set in cool place, and when it begins to harden beat until creamy. Drop spoonfuls on greased paper.

ONION SOUPS.

About the most inexpensive onion soup I have known of anyone's making was made of one onion and a quart of milk. The two were heated together slowly and, when hot, strained to remove the onion, which was then saved for a dressing. Seasoning was then added to the flavored milk, and just before serving two crackers were rolled as fine as flour and added to it. Of course this would be a nice way to take a portion of hot milk, which is particularly good for people with disturbed digestions.

A milk and onion soup heavier in onion than this may be made as closely to resemble an oyster stew as any other combination whatever. Such a soup is a smooth and soothing one.

If the onions are parboiled in one water, drained and cooked in another, and then drained before being added to the milk, the soup will be so mild, both in flavor and effects, as to be inoffensive to those who think they have no use for onions. If they can be induced once to try this soup their prejudice against the strongly scented vegetable will surely be lessened.

The measure of onions used in making the purée for a cream of onion soup will vary, according to the discretion of the cook, from two or three onions to a quart for the same amount of white sauce. For the so-called mock oyster soup made of these ingredients more onions are used than for other onion soups. The little milk, or milk thickened as white sauce, then is added to thin the purée instead of the other way around, when the onion is added to thicken and flavor.

The following methods of making onion soup are those practiced by various housewives:

Onion Soup I.—One quart of milk, two large onions, one tablespoon of butter. Brown the butter slightly in a saucepan, slice in the onions, let them cook through and brown, but not burn. Heat milk to boiling point. Cut two slices of bread in inch pieces and lay in a tureen. Put the cooked onions on the bread, pour over them the hot milk, and then one cup of hot cream. Season with salt and pepper.

Onion Soup II.—Parboil two large onions five minutes, then remove and chop fine. Add one tablespoon of grated carrot, place in a saucepan over the fire with one ounce of beef fat, and cook six minutes. Add one tablespoon of flour, stir a few minutes, then add one quart of boiling water, one-half tablespoon of salt, a few dashes of pepper, and one teaspoon of beef extract. Cook thirty minutes, then strain and add one-fourth of a cup of cream, and serve.

Onion Soup III.—Put a small piece of butter in a saucepan, and, when quite hot, put in three large onions cut into thin slices. Cook them until they are red, then put in one-half a cup of flour and cook, stirring all the time. When done, pour in a pint of hot water with salt and pepper, let boil a minute, and set aside. When ready to serve, put in a quart of boiling milk and about four potatoes mashed to a paste. It is better to add the liquid to the potato, stirring all the time.

Onion Soup IV.—Fry carefully one quart of sliced onions in a little butter, cooking to a light brown. Add salt and pepper, and, when the onions have taken a good color, add five cups of cold water and simmer one hour.

Onion Soup V.—Brown two onions in a saucepan with one ounce of butter, stir in a little flour, and moisten with three pints of white broth. Season with salt and pepper and cook for ten minutes. Place six pieces of bread in a tureen, cover them with fine slices of Swiss cheese, pour the broth over them, grate a little cheese on the top, and put in the oven for five minutes before serving.—Jane Eddington in the *Chicago Tribune*.

Better Coffee Making

THERE is, perhaps, no subject of greater interest to the vast majority of housekeepers in the United States than that of methods of coffee making, and information as to what contributes to the deliciousness of this favorite American beverage. At a convention of the National Coffee Roasters Association recently held, Mr. Edward Aborn, a member of that organization read a paper on the subject of "Better Coffee Making," which contains so much that is good that we are publishing the greater part of the paper herewith. Mr. Aborn said in part:

Ex-President Eliot, writing upon "The Happy Life," describing eating and drinking as one of the legitimate satisfactions of life, a foundation for other satisfactions, mentions the dying old woman who was asked by her minister, "here at the end of a long life, which of the Lord's mercies are you most thankful for?"

Her eye brightened as she answered, "My victuals." "My coffee" might be a coffee lover's answer to the same question, especially in view of the modern valuation of coffee, not only for its cheering effect upon the human spirit, but for its strengthening of bodily efficiency. Coupled with bread and as a balance diet it is receiving scientific recognition.

hopes as of the hopes of many an ambitious brand of coffee which comes perfect to where it is placed, or shall we say buried, in a wrongly used coffee pot which bears this message: "All hope abandon, ye who enter here."

The Jerseyman who was arrested charged with beating his wife because of the vile coffee she served him, used a too radical method of coffee reform, but he placed the emphasis rightly, on the making, not on the coffee.

Between two coffee cooks, the housewife and the roaster, lies the ultimate fate of coffee. And the roaster is not only the real cook, but the real adviser of the housewife with a great opportunity before him at the present time. * * *

Of first importance in coffee making is the granulation, a fundamental factor in all brewing methods.

One company estimates that 75 per cent. of their complaints are due to faulty and variable grinding by grocers. Another declares coarse granulation a waste and urges the valuable plan of a scientific determination of the relation of granulation to the yield of liquor.

There should be widely distributed a microscopic cross-section view of the coffee bean which shows the small cells of which the bean is formed, plainly suggesting that the more



VIEW IN ROASTING ROOM OF A MODERN COFFEE ROASTING PLANT.

If it serves, therefore, both mind and body, it is one of the great natural resources to be conserved in every stage of its preparation. Its final stage, brewing, is a vital one, where its benefits are often injured or lost.

The relation of "Better Coffee Making" to human welfare was recognized by the National Conservation Congress this year by the inclusion of coffee making devices in the exhibits, "tending to conserve general health and well-being."

United States army officials have expressed interest in the subject, declaring it important to the welfare of the soldiers.

A Brazil coffee commissioner declares that the United States is losing the benefit of coffee by faulty making. Any good ear to the ground can hear a general grumbling about coffee not being what it ought to be and can be, in the home, unjustly blaming dealers and brands for sins of the brewing.

A certain motorman sacrificed his lunch hour, and came a long distance into the New York coffee district as into a promised land, in a pathetically eager search for some magic brand, whatever its price, which would fulfill his dreams of good coffee as a daily blessing. He discovered that it was the family coffee pot which had been the destroyer of his

the cells are "broken up" in grinding, the quicker and more thorough their yield.

There are three general methods of coffee making mentioned by the roasters:

1. Boiling, or near boiling, the usual coffee pot method.
2. Percolation, which includes all methods of straining through metal, wire or china-ware sieves.
3. Filtration, familiarly known as the drip process, which differs from percolation in utilizing a fabric, like muslin, instead of a sieve, thus permitting finer granulation and a closer straining or filtering.

Boiling, from 5 to 10 minutes, variously given, is preferred by a few, but is more generally mentioned merely as one of several methods.

Boiling is severely condemned by many roasters.

"Too primitive," says one. "Boil it, spoil it," another advertises.

With boiled, or near boiled coffee, eggs or a dash of cold water, or as in a November magazine recipe, pieces of salt codfish skin (the oldest settler) are advised for overcoming the fault of cloudiness or muddiness.

The theory of boiled coffee assumes the necessity of a double cooking, boiling added to roasting.

Coarse or medium granulation is used, and the cells are thus only partially divided. More of the crude fiber or bean-like shell is cooked in than by other methods, and when not well settled, a proportion of grounds is to be digested. The aroma, to quote one roaster, "being volatile, is destroyed by overcooking," and the crude fibre obscures the flavor. A very serious consideration is the excessive tannin produced by over-boiling, or over-infusion, causing an injurious effect.

One current recipe advises the futile effort of saving the aroma by stopping up the spout and arresting the steam. The determining factor with the aroma, however, seems to be heat. Over-cooking kills it and the most fragrant infusion loses it by chilling.

Eggs are an intrusion which produce, do they not, a product containing a foreign substance, to be so branded under Pure Food Laws? Other "settlers," like cold water and fish skin are not improvements to flavor.

The "near-boiling" or "coming to a boil" method advocated by many is some improvement upon boiling. It represents, in slighter degree, the same principles of second cooking, medium granulation and the various settling agencies are necessary. Its advocates claim it to produce the fullest and best flavor. This is strongly disputed and it is declared by many to produce over-drawn coffee, deficient in aromatic quality with an injurious proportion of tannin from unnecessarily long infusion.

The percolation method is exemplified by several types of devices. Tin or metal pots and strainers are subject to dangerous corrosion. The china or stoneware strainer is hygienic and clean. Its vital faults are, that being a coarse sieve, it will not hold fine granulation, thus losing strength and the percolating surface being at the bottom only, percolation is checked or stopped, when the strainer is filled over a certain depth, causing overdrawing and chilling.

The latest and most advertised device is the fountainlike percolator. Heated water, under the force of condensation, rises through a tube and sprays over the grounds. This process is continuous and the dregs are washed by a constant flow.

This percolator is favored by some roasters, but meets with sharp criticism by a number. "Utterly false and misleading," says one roaster.

Its first fault is the supposed merit which a leading percolator manufacturer advertises in exact words as follows: "Percolation is completed *before* the boiling point is reached." No proper extraction of quality is possible by any percolating method with water not at the full boiling point. This fact is well known and special urns with patent valves which open only to water at the highest boiling point are a recent improvement.

The waste of medium granulation is also an objection to these percolators, as they use a metal sieve which will not hold finely pulverized coffee. A dangerous fault is also mentioned by a roaster, who tersely states, "Too hard to keep clean."

The growth of the use of this percolator, more stimulated by advertising than other devices, is due for one reason, it may be said, to prevailing dissatisfaction with ancient coffee pot methods, which welcomes the clearer and apparently improved percolator product. The claim of being self-working is also an attraction.

Finally, there is the filtration method, or so-called "Drip Process." It is identically the same as the restaurant urn method. The only difference is the urn's hot water jacket, which serves only to keep the brewed coffee hot.

The filtration process consists of passing boiling water through finely pulverized coffee, held in muslin, or other fabric, as a filtering material.

Its advocates strongly claim it to be the one right way and the ultimate method in the truest development of quality and

health value. It is also the simplest of all methods, and requires the least quantity of coffee.

The theory back of filtration is that coffee is completely cooked in the roasting. That the desirable qualities are thus perfectly developed in the cells and ready for immediate fusion with boiling water, no second cooking being necessary.

It is claimed to extract only the desired elements at the highest aromatic point, leaving the cruder substances in the grounds, separating the good from the evil, instead of mixing the two as in boiling methods. It assures a wine-like clearness and a purer liquor free from sediment, or dirt, or any foreign matter that may be contained in the grounds and swallowed when the liquor is not filtered as with the common coffee pot methods.

Opinions differ as to the rate of passing the water through the grounds. Some favor slow filtration, a longer infusion of water and grounds, which to others is over-drawing. The latter's claim is that a certain uniform, but not checked flow, properly concentrated, produces the purest and finest aromatic quality. These contrasting principles are applied by regulating the area of filtering surface as several devices show.

A main criticism of the filtration method is that the filter bag becomes foul.

Several devices utilize an easily renewed flat piece of muslin to replace the obnoxious bag and the wise discovery of an old hotelkeeper alleviates the bag evil. His direction to keep the bag after using submerged in clean cold water, never al-

lowing it to dry, has many times been followed with success and a cessation of complaints.

It is the drying process which sours the bag. It will keep sweet a long time if kept wet. It should be carefully rinsed but never dried.

In restaurant urns the metal faucet, which becomes corroded, should be replaced by a porcelain faucet, a greatly needed improvement.

In summing up we will first discuss the points on health value. Health value is not for coffee roasters to decide, but should be inquired into as a vital consideration.

Informal tests by the head domestic teacher in the East Orange, N. J., schools, revealed that a squad of pupils showed more increased heart action from boiled coffee than filtered coffee. Also an individual case, cited because perhaps typical, represented by a letter recently written, reading as follows: "I had been advised by my doctor to give up coffee on account of the uncomfortable feeling and gassy effect after having some for breakfast, which has disappeared since drinking coffee made by the filtering method. I have also noticed when I happen to drink coffee made by the old method, I get a return of the discomfort."

A physician, discussing these cases, stated that the bad effect probably was due to the tannic acid, which neutralized the gastric juices and checked digestion, causing distress.

The first question in quality value consideration methods is this.

What is the taste of the people? Is there, as some claim, some preference for boiled, or near-boiled coffee, in comparison with filtered coffee? Is there one taste for the filtered coffee and another for the older kind, and neither taste to be suited except by one kind? Or is the older method but an ancient custom, varying according to family traditions and dating from the backwoods days when coffee was but partially roasted in home ovens, coarsely cracked and necessarily boiled? Are these old methods, not devised from scientific or skilled knowledge, simply a long followed habit of ancestors who knew no other? Is it the chief point, as urged, that the people are laboring under a misapprehension that coffee must be cooked and that they readily accept the newer method, when shown, as a better way?

These are debatable questions between the "old method" standpatter and the new method "Progressive."

Of significant evidence is the drift away from old ideas to



DAINTY COFFEE SERVICE.

the newer "percolator" idea. More unanswerable is the following fact:

Roasters, in demonstrating their coffee, exhibiting it at its best, pleasing all tastes, from all sections, use unanimously the filtration method.

They advise various methods, but use themselves but one. They serve a kind of coffee which can be made in only one way, and it is a different product altogether from that produced by other methods.

At the World's Fair, in Chicago, filtration was used with what success is well known.

At St. Louis, filtration was also used successfully as always. At these and other exhibitions tastes from all sections of the United States are to be pleased with coffee made by the filtration process.

In high-class hotels and restaurants, everywhere, and wherever the public taste in brewed coffee is successfully catered to, the one method is used. Experience in making coffee and in contact with crowds at exhibits, etc., is convincing in showing that it is a mistake to brew coffee the one way and leave "follow up" results to whatever method purchasers are accustomed. The buyer comes back declaring the coffee not the same, or that the magic is in the making.

That's it. There is magic in the making. And when the coffee roasters, or the conservation congress or the proposed new National Health Bureau or any other competent agency, educates the people in "better coffee making," there will be a new and better understanding of one of the greatest products of the earth, coffee, which already beloved, has a still greater future as a human blessing in cheering the spirit and strengthening the body of man.

A PAN OF SOUR CREAM BISCUITS.

Sour cream biscuits are greatly liked by many people, and they are so easily made that the housewife who has once formed the habit of stirring them up will find it very little work, and her family will appreciate the effort made. A writer in the *Woman's Magazine* recommends the following method for making sour cream biscuits:

Put a pint of flour, half a teaspoonful of salt, two level teaspoonfuls of baking powder and a scanty level half teaspoonful of soda into a bowl. With the fingertips knead a heaping tablespoonful of butter or lard into this, until the mixture is powdery.

Then, with a fork mix in about one cupful of sour cream until it is a soft dough—once past the drop-batter stage, the softer the better. Give it a swift blending and toss on to a square of lightly floured, clean paper—the paraffin paper that comes in biscuit boxes is good for this.

Now, with the hands shape it into a smooth sheet, without kneading, from half to three-quarters of an inch thick, according to your liking for thin and crisp or thick and bread-like biscuit; cut into small circle, no more than an inch and a half in diameter. Place far enough apart on a lightly floured tin to insure crisp baking all around, and bake about 12 minutes in a hot oven.

If you have a well-arranged kitchen, with your materials ready to your hand, the entire process of making may be gone through in three minutes, with but one bowl, a cup and a fork left to wash.

The hot biscuit expert will usually tell you that biscuit made with sour milk or cream, or buttermilk and soda far excel the baking powder variety. There is a difference in texture, the sour milk and soda sort usually having a velvetiness and tenderness that the other sort lacks, although I must admit, I have eaten baking powder biscuit that I have mistaken for the other.

Baking powder biscuits are made precisely like these sour cream ones, except that sweet milk or water is substituted for the sour cream or buttermilk, the soda is omitted and the baking powder is doubled, that is, two heaping teaspoonfuls are put in instead of two level ones.

It used to be the theory that baking powder begins its raising processes immediately after mixing with liquids, and that immediate baking is essential. It is still the theory, but the practice of delaying baking for two hours is working in some households beautifully.

That is, it is possible to make the dough and cut it into biscuit several hours before it is baked, and it will bake light and delicate. However, I have found it necessary to mix the dough stiffer and to keep it in a very cold place until it goes into the oven. And I must admit that in the end I have a preference for the quickly made and baked sort.

The temperature of the oven is another thing to be taken into account. A quick, hot oven is essential for the ideal baking of these light biscuits. They should rise at once into

fluffy balls, then crisp and color a light, golden brown. Ten or twelve minutes usually suffices for their baking.

Some day when you have a quantity of cold mashed potato left, try using two cupfuls of the potato to this recipe. Add this to the flour after the shortening is rubbed through, and blend it well before you add your liquid. Cut out rounds three-quarters of an inch thick and bake in a quick oven 12 or 15 minutes. This is almost a potato scone recipe and makes a delicious breakfast hot bread, being at the same time much simpler than most potato scone recipes.

EXPENSIVE WRAPPERS.

Mr. C. C. Neale, commissioner of the state department of weights and measures of Minnesota, it is announced, is going to try to bring to the attention of the next legislature of that state a number of matters coming under his department. One of these is the matter of wrappers for various kinds of foods. An agent of the department recently sent to Mr. Neale a wrapper taken from a seven-pound ham, which weighed nearly half a pound. It was covered with a gelatin preparation, the purpose of which, according to the manufacturer, is to keep the meat in good condition. At the price ham sells at such a wrapper comes pretty high to the consumer who purchases the meat. Commissioner Neale expects to collect sufficient evidence of a similar character to go before the Minnesota legislators and ask that they pass a law regulating such wrapping.

Interesting Food Notes

Production of Salt in New York.

Salt worth \$2,191,485 was produced in New York State last year, according to figures made public by State Geologist Clarke. The product was marketed in 10,082,656 barrels and was greater than that of any other previous year except 1910, when 187,617 more barrels were sold.

Short Olive Crop in Greece.

Consul General William H. Gale, of Athens, reports that, owing to a continuation of the dry weather during the month of September and the first half of the month of October, the prospects of the olive crop are even less promising than they were a month ago. It is officially estimated that the yield for the entire Kingdom will be only 6,800,000 oke, or approximately 2,290,000 gallons.

Life Will Soon Be Worth Living in Oskaloosa.

The City Council of Oskaloosa, Iowa, has taken steps to secure the passage of an ordinance requiring the inspection at stated intervals of meat markets, restaurants, dairies and other places where food for the public is kept. Those places up to the standard will be given certificates and others will be refused. The list of names will be published giving the standing of the places for the benefit of the public.

Cottonseed Oil Consumption in Italy.

Italy's exceedingly small production of olive oil in 1910-11, amounting to only 37,143,372 gallons, created a heavy demand for cottonseed oil, imports of which from a total in 1910 valued at \$699,959 were \$2,362,879 in 1911, practically all of which was from the United States. The yield of olive oil for the 1911-12 season was 65,170,862 gallons, and the quality above the average. Prices have shown a tendency to decline somewhat. The demand in Italy for cottonseed oil this year will, it is thought, be considerably less than last year.

Germans Not Heavy Meat Eaters.

Statistics recently published by the agricultural chamber of the Rhine Province show that so far from meat being the chief article of diet among the laboring classes of Germany, less than three ounces a day are eaten, as against 3½ pounds of potatoes, and 14½ ounces of bread. Even eggs are not used in the place of meat, only one being eaten every fourth day. Investigations into the diet of miners in Silesia show that practically no meat whatever is consumed.

World's Poultry Congress.

A World's Poultry Congress in 1914 is planned by the International Association of Poultry Instructors and Investigators, organized last July in London, England, E. Brown, of London, president, and Dr. Raymond Pearl, of the Maine Agricultural Station, Orono, Me., secretary.

Feed Control Officials Meet

THE fourth annual convention of the Association of Feed Control Officials of the United States, was held at Washington, D. C., November 18-19. The meeting was presided over by President W. J. Jones, Jr., who in his address reviewed at some length matters of immediate interest to the members of the Association. He said that through the hearty co-operation of manufacturers and officials great improvement had taken place in the feedstuffs trade, not only from the standpoint of legislation and inspection, but from the commercial side as well.

One of the original objects, if not the chief one, for which this organization of feed officials was formed four years ago was to procure if possible the enactment of a uniform law governing feedstuffs, by the various states. In speaking of this matter President Jones said:

"That the problem of uniformity has been solved needs no further comment than the general approval of the Uniform Law and the definitions, the latter of which I believe have been adopted in the majority of states having feed control officials.

"Many of the feedstuff laws on the statutes of the various states are the same in all the points as the Uniform Law, and a number of states have passed it with but few minor alterations; four additional states to my knowledge, are contemplating its passage, and one of changing its laws to meet its requirements."

The Executive Committee report was read and considered at some length by the assembly. That subject which aroused the greatest amount of discussion was the question of the adoption of new definitions to govern standard feedstuffs of certain kinds. The committee recommended the adoption of the cottonseed meal definition which has been adopted by the Cotton Seed Crushers' Association, and which reads as follows:

"Cottonseed meal is a product of the cottonseed only, composed principally of the kernel with such portion of the hull as is necessary in the manufacture of oil; provided that nothing shall be recognized as cottonseed meal that does not conform to the requirement above set forth and that does not contain at least 36 per cent of protein.

"Choice cottonseed meal must be finely ground, not necessarily bolted, perfectly sound and sweet in odor, yellow, free from excess of lint and must contain at least 40 per cent of protein.

"Prime cottonseed meal must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color, yellow, not brown or reddish, free from excess of lint, and must contain at least 38.6 per cent of protein.

"Good cottonseed meal must be finely ground, not necessarily bolted, of sweet odor, reasonably bright in color and must contain at least 36 per cent of protein.

"Cottonseed feed is a mixture of cottonseed meal and cottonseed hulls containing less than 36 per cent of crude protein, and shall be plainly marked, 'Mixture of cottonseed meal and cottonseed hulls.'"

Mr. Geo. S. Frapp, of College Station, Texas, voiced an objection to the definitions, inasmuch as the Texas law requires a higher per cent of protein. In the course of his remarks Mr. Frapp said:

"In considering the definitions, I am inclined to believe with the executive committee that, under the circumstances, they have about as good definitions as possible. It will be necessary, eventually, to include in these definitions, as they say, a guarantee for fiber. I wish to call attention, however, to the fact that Texas cannot accept a minimum standard of 36 per cent of protein for cottonseed meal. Texas cottonseed meal is a great deal richer in protein than meal from other portions of the country. I understand that Oklahoma meal is poorer than Texas meal, and that Arkansas meal is poorer. The present standard for cottonseed meal in Texas is 43 per cent of protein. Now, of course, it would be impossible to adopt that standard for the entire country; at the same time, it is not possible for Texas to lower its standard to 36 per cent. If those standards were lowered from 43 per cent to 36 per cent, that would allow the addition of about 15 per cent more hulls than under the law is at present allowed. Of course, with meal at \$28 a ton and hulls at \$10 a ton, it would be a profitable addition if it were allowed. So I think that this association should know that these standards are not ac-

ceptable to the state of Texas. As far as the other states are concerned, they can be applied as they desire. The meal in Texas, taking the averages of several hundred analyses made by the feed control officials for several years, will run about 47 per cent of protein. I do not remember the exact figure, but it is something around that figure, which is 3 per cent or 4 per cent above the minimum. It is clear, therefore, that these interstate rules cannot apply to our state without allowing the admixture of hulls. The law of the state of Texas requires cottonseed meal to be sold as cottonseed meal; a mixture of cottonseed meal and cottonseed hulls, under the law, is not cottonseed meal. I presume that is the case in all the states and I understand that is the object of the uniform law, to provide that each feed shall be sold under its true name and on its true merits. It would be contrary to the Texas law and contrary to the purposes of this association if we should allow the introduction of hulls in meal, so that a mixture of meal and hulls is sold as cottonseed meal; the feeders would not stand for it, the people would not stand for it. There is a constant tendency to lower the grade of meal to conform with the requirements of the law, to lower it down to the minimum required by the law, 43 per cent, and lower, if they can get it. There is that tendency among some manufacturers. The point is that it is the same way in other lines, to take what the law will give. In the case of milk, where the fat is 2½ per cent, the minimum required by the law, I understand that all you get is 2½ per cent of fat. My object in bringing this out was not to oppose the report of the committee, but to merely bring out the fact that this standard is not acceptable to the state of Texas as far as 36 per cent of protein is concerned."

Mr. Kellogg of Pennsylvania, said that the proposed definition with the lower protein content requirement would not come under the law of his state. The definitions were, however, accepted as the best that could be framed at this time.

Definitions for other products were taken up at a later session with the result that the following were adopted by the convention:

"Hominy meal, hominy feed, or hominy chop is a mixture of the bran coating, the germ and a part of the starchy portion of the corn kernel obtained in the manufacture of hominy grits for human consumption.

"Wheat white middlings or white middlings are the part of the offal of what is between the shorts or standard middlings and the red dark.

"Clipped oat refuse (term oat clippings not recognized) is the resultant by-product in the manufacture of clipped oats. It may contain light, chaffy material broken from the ends of the hulls, empty hulls, light, immature oats and dust. It must not contain an excessive amount of oat hulls.

"Cornstarch by-product with bran is that part of commercial shelled corn that remains after the separation of the larger part of the starch, the germ and the bran by the processes employed in the manufacture of starch and glucose. It may or may not contain corn solubles.

"Cornstarch by-product without bran is that part of commercial shelled corn that remains after the separation of the larger part of the starch, the germ and the bran by the processes employed in the manufacture of starch and glucose. It may or may not contain corn solubles.

Another important subject which the convention considered was that of by-products. Prof. F. D. Fuller of Indiana, gave an address on "Oat By-Products; Their Value and Conservation," in the course of which he characterized by-products as the great question of the future. He said in part:

"Mr. President, what attitude is to be taken by the feed control officials regarding the use of by-products? In many industries today, from the utilization of by-products are derived the profits. In the milling industry the manufacturer must realize profit from his by-products in order to furnish us with food at a reasonable price. The cost of certain articles of food, therefore, is dependent upon the utilization of every secondary product at hand. Has not this phase of the question, then, some bearing on the high cost of living? Is it not true, then, that if we encourage or rather demand the waste of these by-products, we are instrumental in increasing the cost of the necessities of life? President Taft, in an address at the National Dairy show in Chicago last November, made this statement: 'The food problem in the United States may in the near future become a serious one.

We have been in the habit of figuring that we have so much land and such good land that there never could come a time when we would have more people than we could feed. The last census statistics indicate otherwise. Only about 150,000,000 acres more are capable of tillage, either by irrigation, reclamation or drainage. In order to increase our food supply to meet the growth of population, which in 50 years is likely to be 200,000,000, we are obliged to resort to those methods that involve greater scientific knowledge. Now Mr. President, what are to be the factors that should assist in furnishing this 'scientific knowledge' if not the scientific men composing the membership of this and similar associations?

"Dr. Armsby, than whom is none more competent to speak on questions of nutrition, says in effect that our cereal grains must eventually all be used for human food, and that we must use our by-products or waste material exclusively for animal

foods when he makes the statement 'as the demand for human food increases * * * he (man) will be compelled to turn more and more to the by-products and utilize them as a food producer, as a means of utilizing the stored up energy and protein which otherwise go to waste.'

"Recent digestion experiments conducted by the Maryland Experiment Station with by-product feeds prove conclusively that 'many of them have a food value which should be utilized.'"

Election of officers of the Association for the ensuing year resulted as follows:

President, J. D. Turner, Kentucky.

Vice-president, Dr. T. J. Bryan, Illinois.

Secretary-Treasurer, Dr. G. M. McNider, North Carolina.

Executive Committee, Dr. C. D. Woods, Maine; Dr. J. K. Haywood, United States Department of Agriculture; L. F. Brown, New York.

Specialty Manufacturers Hold Convention

THE fourth annual convention of the American Specialty Manufacturers was held in Chicago, November 21-22.

President W. H. Lipe of the association in his opening remarks gave a concise history of the grocery business and its evolutions down to the organization of the American Specialty Manufacturers' Association.

"We cleaned house within our own ranks," said President Lipe, "and with the exception of isolated instances, which we will always have with us, the specialty business from manufacturer to retailer has been materially improved, to the gratification of all."

Among those who addressed the meeting was President John W. Lux of the National Association of Retail Grocers, who in his speech sounded the demand of the merchants for a square deal, declaring that the independent retail merchant must buy his goods as cheaply as any department store, chain store or mail order house, and called upon the manufacturers to co-operate with the retailers to accomplish that result.

George E. Lichty, president of the National Wholesale Grocers' Association, was another prominent speaker before the convention. He recommended to the association the appointment of an "economy conference committee" consisting of representatives of manufacturers, wholesalers and retailers, to combat the high cost of living agitation. It was suggested by Mr. Lichty that such a committee should consider all changes in prices of food products from the standpoint of all factors in distribution and he predicted that such a movement would go far toward eliminating the suspicion and distrust which the public at present is inclined to view such changes in prices. In the course of his remarks on this subject Mr. Lichty said:

"The American Specialty Manufacturers' Association, the National Wholesale Grocers' Association and the National Association of Retail Grocers are the three great organized bodies that should work thoroughly in harmony, each with the other, along lines of public welfare and in such a manner as will tend to simplify production, distribution and final introduction to the consumer.

"With regard to this question of reducing the cost of living, it has often occurred to me that a small, intelligent and compact committee from each of the three bodies mentioned could be appointed by their respective organizations, which, collectively, might be known as an 'economy conference committee.' When you, the manufacturers, are ready to make changes that are necessary by market conditions, either by advances or declines of raw material, freight, labor, containers or any other element entering into the cost of your goods, you could consult and co-operate with the representatives of the other two great forces of distribution and make such necessary changes in size of packages or containers, or weights of contents as will be consistent with the cost of production, and which the experience of the distributor and retailer could suggest without curtailing the sale or volume.

"At the same time you could take into consideration the great interests of the consuming public, and in that manner the criticisms which are now offered so freely would be greatly eliminated and the public that is always so ready with suspicion and distrust would be taken into confidence and deprived of those weapons. Then our respective organizations would be assisting in accomplishing the things for which we, as the individual without a single exception stand for, that of

fair and honest merchandising. In this sales would in the long run be increased and come to the consumer reduced."

The resolutions in full as adopted by the convention read as follows:

Resolved, By the American Specialty Manufacturers' Association that uniformity between national and state laws requiring the stating of net weight or numerical count on package specialties, is essential in order to not unnecessarily restrict and hamper interstate traffic in such commodities, and we therefore are favorable to the early enactment of a National Net Weight Law.

Further Resolved; That, in order that a specialty manufacturer may be allowed suitable latitude for complying under all climatic and other conditions inducing shrinkage or variation in weight in specialties, any such law should, as a matter of reason and justice, make equitable provision for tolerances and allowances.

Whereas, Specialty orders are secured at great expense to the manufacturer; and

Whereas, The retailer's and manufacturer's signature and the jobber's acceptance of such orders creates a legal contract; and

Whereas, The use of the stamp on a member's order blanks protects the jobber and retailer against misrepresentation and assures the jobber of his profit and the retailer of the prompt delivery of his goods; and

Whereas, Some jobbers and retailers apparently still do not comprehend the obligation involved in the signing and the acceptance of retail orders and in this way work in detriment to the general good of the trade;

Resolved, That the Executive Committee of this association is hereby instructed to take such effective action in the premises, whenever occasion demands, as they may consider best for the protection and of the interests of our members.

Whereas, Cash discount is a consideration voluntarily extended by manufacturer to dealer for the payment of invoices within a specified period; and

Whereas, No obligation exists for the manufacturer to make such discount allowance except it be in strict conformity with the terms of purchase by the dealer as specified on the invoice; and

Whereas, The deduction of cash discount by wholesale distributors except in conformity with invoice terms is unjustifiable and not in harmony with co-operation in the trade; and

Whereas, Some wholesale distributors assume to consider cash discount as a right and deduct it irrespective of the time limit for its payment, thereby causing much annoyance and complication in the orderly conduct of the specialty manufacturer's business;

Resolved, By the American Specialty Manufacturers' Association that the members of this organization uniformly insist upon strict adherence by wholesale distributors to invoice terms for cash discount allowance and decline to allow it otherwise.

Resolved, That the association extends its hearty thanks and sincere appreciation to Right Rev. Charles Edward Cheney, Dr. W. A. Evans, Mr. John W. Lux, Mr. Alvin M. Graves, Mr. George E. Lichty, Mr. Harry A. Wheeler, Mr. J. H. McLaurin, Mr. John A. Green, Mr. W. H. Ingersoll, the newspapers of Chicago and especially the *Chicago Inter-Ocean*, the *Chicago Evening Post*, and the representatives of

the trade press and to all others who, by their attendance at and participation in the proceedings of this convention, have contributed to its interest and success.

Resolved, That the American Specialty Manufacturers' Association, in convention assembled, records its appreciation of the very effective aid rendered throughout the country by the representatives of its members in the promotion of the work for the improvement of specialty trade conditions:

Further Resolved, That the Secretary of this association is directed to forward an authenticated copy of this resolution to the president of each auxiliary association and of the New York, the Philadelphia and the New England associations of manufacturers' representatives, with request that the same be brought to the attention of their respective members.

Resolved, That the association extends to its retiring officers, directors and members of committees, its appreciation for the time and attention that they have devoted to the affairs of the association during the past year, and for the efficient manner in which they have performed the duties of their respective offices.



JOHN E. LINIHAN.

Whereas, By his zeal, distinguished ability, fidelity and congenial personality, Mr. Walter H. Lipe, President of this association for the past three years, has greatly contributed to its progress and high standing:

Resolved, That the sincere thanks and cordial good wishes of the members of the association in annual convention assembled are hereby extended to Mr. Lipe in grateful acknowledgment of our appreciation and with assurances of our highest esteem.

Further Resolved, That this resolution be spread in full upon the records of the association and that an engrossed copy thereof be presented to Mr. Lipe.

CHAS. T. LEE,
Chairman of Committee on Resolutions.
A. C. MONAGLE,
Secretary of the Association.

Election of officers for the association for the ensuing year resulted as follows:

President—Mr. John E. Linihan, of the United Cereal Mills, Limited, of Chicago.

First Vice President.—Mr. W. M. McCormick, of McCormick & Company, Baltimore.

Second Vice President.—Mr. Fred Mason, of the Shredded Wheat Company.

Third Vice President.—Mr. W. B. Cherry, of the Merrell-Soule Company, Syracuse, N. Y.

Treasurer.—Mr. Victor Garrett.

Directors (to serve for three years).—Mr. Walter H. Lipe, of the Beech-Nut Packing Company; Mr. Andrew Ross, of the Kellogg Toasted Corn Flake Company; Mr. Louis Runkel, of Runkel Brothers, Incorporated.

Directors (to serve one year to succeed Messrs. Linihan and Cherry, respectively, who have been moved up to higher positions).—Mr. C. F. Johnson, of the B. J. Johnson Soap Company, Milwaukee, Wis.; Mr. George Nowland, of Fels & Company, Philadelphia.

Food News Notes

Prune Nectar.

A drink made from prunes is now being manufactured in Boise, Idaho, in a small way, the new beverage being named prune nectar. It is stated that none of the richness of the prune flavor is destroyed in the manufacturing process, and it is necessary to dilute the sirup with an equal amount of water before drinking.

Will Diminish Walnut Production.

A report comes from California that a 500-acre ranch near Los Angeles, set to full-bearing walnut trees and comprising what is said to be the largest walnut grove in the world, has been purchased by a syndicate which will cut it up into residence lots. As California is the only walnut producing state in the Union and the output there is greatly inadequate to meet this country's consumption, the destruction of this big grove will necessitate still larger importations. Incidentally, we might remark, another cause for the high cost of living is found in such incidents.

Municipal School of Domestic Economy.

An English press report states that a municipal school of domestic economy is being erected in Manchester at a cost of \$125,000. The school when completed will accommodate 300 students, 100 of whom will be trained to become teachers of domestic economy.

Much Food Destroyed in New York.

Dr. Ernest J. Lederle, health commissioner of the city of New York, declared before an investigation committee recently that within the past year his department had seized 21,000,000 pounds of miscellaneous food products and confiscated it as unfit for human consumption.

California Olive Crop Short.

The California olive harvest is in progress, and reports from the various districts are that the yield will not be more than half of normal.

U. S. Supreme Court Avoids Decision on Eggs.

In a recent case involving the seizure of 413 cans of frozen egg product in New Jersey, brought before the Supreme Court of the United States, the court saved itself the necessity of deciding when an egg is "decomposed" by holding the United States Circuit Court of Appeals for the Third Circuit had no jurisdiction to decide the question, and therefore the Supreme Court itself had none.

Iowa Pure Food Law Is Constitutional.

Judge W. S. Hamilton of Lee county, Iowa, has decided that the Iowa state pure food law is constitutional and that it covers medicines as well as drugs. The decision was made in the case of the K. K. K. Medicine Company of Keokuk, Iowa, against W. B. Barney, state dairy commissioner. The company contended that the pure food law was not constitutional and that it would not apply to a medicine they were making, and which the company had been notified must comply with the law. The state contended that the law was constitutional, and as stated above the decision was in the state's favor.

Letter from Indiana

By Our Staff Correspondent.

INDIANAPOLIS, IND., Dec. 10.—The most pertinent pure food problems that Indiana has have been dealt with exhaustively by the annual report of the State Board of Health, just issued and forwarded to Governor Marshall. The resume of statistics, kept by inspectors in the state's pure food and drug laboratories, throws light on the situation in the Hoosier state that has before been unavailable.

The most pregnant statement in the entire report is that "already food adulteration as it was practiced in Indiana when the laboratories were opened, is rarely met with. Each year the inspector finds it increasingly difficult to collect sufficient samples for the use of the chemists in the laboratories. Each year false labels, exaggerated statements of composition and quality become less, and with each visit the inspector seems to find the citizens of the town more interested in his work and more willing to assist him." The statistics which accompany these assertions prove conclusively that either there is a lack of activity on the part of the officials or that the food adulteration plague is finally being eradicated in Indiana. The latter is true.

Thirty-five soda-pop samples and other summer drinks returned a per cent of 17.1 illegal. Benzoic acid and saccharin were present in several. "The condition of summer beverages is greatly improved over former years when benzoic acid and saccharin were commonly present," the report said.

Of the nineteen samples of candy examined, two were illegal. These both were coated with shellac. Twenty-seven samples of canned fruits examined found but twelve illegal because of the presence of preservatives or artificial color. All of the thirty-four samples of canned vegetables were legal. A number of the samples were improperly processed, but in other respects they complied with the pure food law. Of the 40 samples of catsup examined, 30 were legal. Eight of the 10 illegal samples were so classed because of the presence of benzoate of soda. Eleven samples of coffee analyzed were pure. Twenty-one samples of lemon extract were examined and one-third of them were illegal. Twenty-four samples of vanilla extract were examined and 6 were illegal because of the presence of vanillin or coumarin. Out of twenty-one samples of flour examined, 3 were illegal, 2 of them because they were heavily bleached. Five of the 17 samples of lard examined were illegal. But one sample out of 22 maple sirup specimens examined was classed as impure. "The day when maple sirups were usually heavily adulterated with sugar sirup evidently is past," Mr. Barnard said.

Eighty-five samples of prepared meats examined returned 13 impure, the majority of that number containing sulphites. Benzoate of soda made one of the 4 samples of mince meat examined illegal. Thirty-four food products of varying character were examined, of which 6 were illegal. Twenty samples of mustard out of 38 were impure. Twelve samples out of 19 specimens of oysters examined were illegal because of the high water content. But 2 samples of the 15 whiskeys examined were illegal, and they contained strychnin and arsenic trioxide. In both cases the additions of the poison probably had been made with criminal intent, the report said.

Fifty-one samples of the 75 vinegars examined were illegal. During the year 399 drug samples were examined and 142 were illegal. Of 55 preparations sold as cough medicines 33 were illegal.

Cases filed during the year against violators of the food and sanitary food and drug act numbered 173. In but 2 cases were the defendants found "not guilty." A total of \$3,331 in fines was assessed against the offenders. Violations of the food and drug law were prosecuted in 140 instances, and 64 of these cases were brought because of the sale of dirty milk. Thirty-three cases were brought because of violation of the sanitary food law, 31 of them being brought because of general insanitary conditions.

* * *

During the year 2,050 samples of food collected by inspectors or sent in by health officers were examined at the state laboratory. Of the total number, 1,504 samples were legal and 546 illegal either because they contained ingredients not allowable under the law, such as chemical preservatives, foreign colors, or were misbranded or otherwise mislabeled. The percentage of adulteration of foodstuffs as shown by the year's work was 26.6. The percentage of adulteration for

1906 was 42.3, for 1907 was 20.2, for 1908 was 25.7, for 1909 was 33.8, for 1910 was 30.9, for 1911 was 32.7.

"Long familiarity with the markets have taught the inspectors that at least 95 per cent of all the goods he inspects are made by conscientious manufacturers who have used every effort to produce goods of high quality," the report declared. "The difference between the conditions of today and those obtaining when the laboratories were opened, when 42 per cent of the samples were reported as impure, is, we believe, a complete proof of the value of pure food legislation adequately enforced."

Forty samples of cream were analyzed during the year, of which 10 were illegal. The samples came from practically every large city in the state. Sixty-three samples of butter were analyzed, of which 40 were legal and 23 were illegal. Many of the illegal butters were made at homes of Indiana farmers by untrained workmen, according to the report. "When the product of the farm dairy is properly handled, the return per pound of butter fat will in many instances be twice what it is at present," the report said.

Six samples of cheese analyzed during the year were found legal. Five samples of condensed milk examined during the year all were classed as legal. Ice cream samples were examined in 159 instances and 46, or 28.9 per cent, were declared illegal. Three samples of beer were examined. One contained arsenic, evidently added for criminal purposes, and the other two were legitimate beers. Forty-three so-called temperance beers were examined and 32 of them, or 74.4 per cent, were illegal because they contained enough alcohol to make them inebriating. Detectives and police officials were foremost in numbers of those who brought the samples to the state laboratories.

There were a great many other things worthy of note to food handlers that happened in Indiana during the month just past. Chief, perhaps, among them was a decision of the Supreme Circuit Court which upheld the right of a state food inspector to purchase samples of suspected food or drug products with the intent to use them for analysis and not for food. The Indiana statute, through a defect, states that the analysis samples are to be purchased for use as food, though the language of the statute is not quite that.

The case in point originally came up before Judge Gallagher of the Laporte Circuit Court when Louis F. Closser was sued by the state board for selling dirty milk. Closser's attorneys put up a defense which declared that the sample examined was not purchased for food. Judge Gallagher dismissed the case on that technicality. Overriding the advice of the attorney general, the state board appealed the case and the Laporte court was reversed, with the following pertinent language: "It is not essential to the validity of the affidavit that it allege that the milk was sold for food. The statute expressly and unqualifiedly prohibits the sale of adulterated milk." The opinion went on: "It is unnecessary to specify the particular kind of dirt, as all and any kind of dirt is prohibited in milk. Nor is it necessary to state the means or manner by which it came to be dirt."

* * *

The egg problem is one of real moment in Indiana, as it is in practically every northern state and some of the southern commonwealths. The Indiana housewife has allowed herself to be "hooked" by the egg men and by her own neighbors to such an extent that the state department has been compelled to step into the situation with ungloved hands.

An investigation is under way to determine how extensive has become the practice of selling cold storage eggs for fresh eggs. The Indianapolis market is and has been for some weeks glutted with cold storage eggs. In most instances the correct labeling is on the eggs, and the housewife really gets eggs at 15 cents less per dozen that are far better, as a rule, than the "fresh" eggs which are now coming in from the country districts, where they have been held up for weeks in hopes of higher prices.

That she can buy cold storage eggs which are suitable for practically every sort of cooking at less price and that she will find approximately four eggs "good" to each one that she finds "good" in her supply of "fresh" eggs is being found true by most of the Indiana heads of families.

The "fresh" products are intensely unsatisfactory, reports

declare. Many in each dozen sent to the local markets during the past few weeks have been "set." Others are afflicted with blackrot. Still others have been held so long that they are worthless.

"It is the conceit of the Indiana housewife that is allowing her to be gulled by the 'fresh' egg sellers," said H. E. Barnard, state food and drug commissioner, recently. "The Indiana housewife is afraid that she will be called on to admit to her neighbor that 'the family' is using storage eggs. Therefore she calmly pays 15 cents a dozen for the alleged fresh product and throws out almost the entire dozen. The prevailing prices for fresh eggs have been around 38 cents to 45 cents a dozen, while storage eggs have been selling in most instances for 25 cents a dozen." The Indiana farmer has been reaping the profit. Just as a side word, the Indiana farmer has reaped about all the profit there was in anything this year. His crops were bountiful and practically every product he has placed on the market has brought enormously high prices.

Another favorite pastime of the farmers now seems to be the introduction of banty eggs in the crates marked "selects." Numerous instances of such practices have been brought to light by state inspectors.

* * *

The annual report of the State Board of Health contained several recommendations of importance to food handling establishments and students of the uplift in food products. Among these was one that the legislature appropriate an additional \$5,000 for better enforcement of the weights and measures act, passed by the 1911 legislature. A movement is on foot to pass a law at the 1913 session, which begins January 9, 1913, providing for the sale of all small fruits and other similar products by weight only in Indiana. Much opposition will be aroused because of the contention of fruit dealers and growers that such a law would enforce unfair competition on them, surrounding states not having such a statute. The problem of the short measure berry box again will be before the legislature.

* * *

Another recommendation in the state board's report seeks to have a law passed relating to the control and eradication of tuberculosis in cattle. A law containing a few minor provisions along such lines already is on the statute books, but the new bill will seek to have the state veterinarian placed under the control of the state board of health. Much opposition also will arise to that provision.

* * *

An item in the report which failed to attract much attention, but which means much to Indiana as a manufacturing state, eulogized the progressiveness of the average Indiana canning factory owner as follows: "This recognition of superiority is due to the fact that the Indiana canner is progressive and conscientious, and recognizes the desirability of sending out only high grade products manufactured from the finest of raw material in sanitary factories, both that his products may comply with all sanitary requirements and because he appreciates the effect the widespread recognition of the fact will have in the development of his industry." Statistics to show what progress the canning industry has made in Indiana are contained in the report.

* * *

W. H. Thompson, a young attorney of Indianapolis, has been selected by the attorney general's office to represent the state in the appeal of the famous benzoate of soda cases, in which the Curtis Bros. Company and the Williams Bros. Company sought to enjoin the State Board of Health from enforcing the portion of the pure food law which pertained to the adulteration of food products by means of preservatives. The case was tried in Federal Court here and, after months of litigation, was decided in favor of the state. The plaintiffs took an appeal to the United States Court of Appeals. Mr. Thompson had charge of the latter part of the fight in the local Federal Court, under the direction of former Attorney General James Bingham.

* * *

A bill which promises to create much "lobbying" both for and against is to be introduced by the Travelers' Protective Association. It contains the most sweeping provisions for a "rebirth" of sanitation in every food-handling establishment, hotel, public hall, theater, state institution and, in short, every type of public building. Not only do its provisions contemplate absolute cleanliness in the handling of all foodstuffs but those who handle the products in any degree are also amenable to the penalties of the act for failure to "keep clean." If the law passes, Indiana will have one of the most advanced sanitation laws in the country.

THE INDIANA APPLE SHOW.

The second Indiana Apple Show, held at Indianapolis in November, was a real success, and the Indiana Horticultural Society has decided to continue the exhibition next year, though a financial loss was incurred both this year and last.

A year ago a group of men in Indiana who had fought for several years to accomplish their purpose rented Tomlinson Hall in Indianapolis and, with the aid of Governor Marshall and quite a copious draft on the state treasury, staged the first Hoosier apple show. It was a success in several ways, but still the Indiana Apple Show Commission, appointed under an act of the 1911 legislature, did not feel that the time or the money that had been expended was repaid.

They determined to try again this year, however, and laid out a larger program, with good results. The number of exhibits on the floor this year was approximately four times as great as in 1911. The quality of the fruit so far surpassed that of last year's exhibits that there scarcely was any need of comparison. Even the lay orchard man could see the difference.

The novelty exhibits also far surpassed those of 1911. One of them contained the novelty feature of the show—an exhibit of apple products fresh from the kitchens of Indiana housewives and from the commercial bakeries of the state.

The state entomologist had the most complete demonstration of orchard culture that ever has been seen in Indiana outside of the Purdue experiment station. Assistants to the state official made those interested at home in the state exhibit, and many a farmer carried home with him a half dozen new ideas of apple culture that will make him dollars next year. Spraying apparatus of all sorts was in the state exhibit, as were exposes of the work of the insects that ravage the apple and other orchard crops.

Dozens of manufacturers this year ranged their exhibits of orchard machinery about the walls of the big hall and in the balconies.

Two men who corralled the sweepstakes prizes have been in the apple business but a short time. Both have obtained results by reclaiming old orchards. F. J. Heacock of the Heacock Fruit Company, Salem, got the big sweepstake prize for the best sixty-box exhibit of Grimes' Golden, Rome Beauty, Ben Davis, Winesap, Westfield and Ralls apples. He was given a \$350 horsepower sprayer by an orchard machinery manufacturing firm. Both Heacock and Elrod had exhibits in the 1911 show but failed to take prizes. They said they had worked wonders in one year by the use of scientific apple culture, the first ideas of which they received at the 1911 show.

The greatest crop of apples that southern Indiana ever has seen was grown in the counties south and west of Indianapolis this year, but the northern counties also sent some wonderful exhibits to the state show. H. M. Widney of DeKalb County carried away many first premiums. First premiums for one-box exhibits included York Imperials, from the B. and A. orchard, Paoli; Stayman and R. I. Greenings, Brushy Fork Fruit Farm, Falmouth; Rome Beauty, Indiana Orchard Company, Paoli; Adkins, O. H. Van Gilder, Salem; Winesap, H. M. Simpson & Son, Vincennes; Yellow Belleflower, L. V. Hopkins, Greenfield.

The real feature of the exposition came as an after thought of the promoters of the show. It was the exhibit class for apple cookery, and it showed several interesting facts about present day culinary art. One was that the average bakery today turns out better pies, cakes and similar pastries in Indiana than the farmer's wife. Also it showed conclusively that the daughters of the Indiana housewives who have attended the scientific domestic training schools in Indiana's public schools can cook so much better than their esteemed mothers that they carried off many of the prizes for pies, jellies, jams, apple butters, etc., which their mothers should have had in the ordinary course of events.

Germans Not Partial to Corn.

An American consul reports that corn meal as an article of human food is scarcely known to the German public. In view of the high cost of breadstuffs in Germany he thinks that American corn meal if once introduced in countries of central and Northern Europe, should result in large shipments from the United States. This would seem to be a good move for all concerned as another press report states that the corn crop is so large in Iowa that there are not enough cribs to hold it, and there is danger that much of the corn will spoil when winter weather begins.

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CHANGE IN SUBSCRIPTION PRICE EFFECTIVE JANUARY, 1913

From January 1, 1913, the subscription price of THE AMERICAN FOOD JOURNAL will be \$2.00 a year in the United States, \$2.50 in Canada, and \$2.50 in other countries in the Postal Union.

Subscription orders at the present price will be accepted, when accompanied by cash or check, up to December 31, 1912.

Present subscribers can renew their subscriptions for one year at the present price, provided the renewal order reaches us before December 31, 1912.

After January 1, 1913, all subscriptions and renewals will be billed at the new price.

MERRY CHRISTMAS!

THE AMERICAN FOOD JOURNAL wishes its readers a Merry Christmas and a Happy New Year. We have varied our cover design this month to give it a Christmas tone, and our artist has taken for the theme the bountiful gifts of the farmer to the American people this year. The plenteous harvest of all kinds of food crops gives an overflowing Cornucopia, and it is well to remember that these large crops are not entirely the result of favorable weather conditions, but come also from more intelligent farming methods.

ANNOUNCEMENT.

Following our usual custom the AMERICAN FOOD JOURNAL will, beginning in the January issue, begin the publication of all bills introduced in the various state legislatures, or the National Congress bearing on food regulation and matters pertaining to that subject. There is always a big demand for the copies of the magazine containing these bills and all who wish to have them complete should send in their subscription or renewal at once, so that no copies will be missed.

REPORT OF THE SECRETARY OF AGRICULTURE.

THE annual report of the Secretary of the United States Department of Agriculture is always an important document and one that is looked forward to with great interest by a large number of people who are not by any means agriculturists. The Department embraces so many Bureaus in fact that one's interests would be limited indeed if some features of the work did not appeal with particular force.

Readers of THE AMERICAN FOOD JOURNAL are concerned with reports of numerous of the departments of research and investigation which are under the direction of the Secretary of Agriculture, and we touch briefly on some of them. The Report for 1912 has just been issued.

Secretary Wilson says that the provisions of the Food and Drugs Act have been vigorously enforced during the year, and 1,459 violations were reported to the Department of Justice, an increase of more than 25 per cent on the number as reported last year. Of these 991 were criminal cases and 468 were recommendations for seizure of adulterated or misbranded foods and drugs.

The first jail sentences for violation of this Act were imposed during the year, and there was a tendency on the part of the courts to impose larger fines for first offenses. Fines amounting to \$14,000 were imposed in criminal cases, and the costs were generally assessed against the defendants. In the seizure cases, decrees of condemnation and forfeiture were entered against 294 shipments of adulterated and misbranded goods. One hundred and three shipments consisting of filthy, decomposed, or putrid substances, or containing added poisonous or deleterious ingredients, which might render them injurious to health, were destroyed, and in several instances such cases have been reported for criminal prosecution. Six hundred and five Notices of Judgment of terminated cases have been published, and over 300 are in course of preparation.

In reference to meat inspection the report states that 85 violations of the meat-inspection amendment (34 Stat., 674) were reported for prosecution, a decrease in number of 16 as compared with the fiscal year 1911. Sixty-five cases were prosecuted successfully during the year, and fines were imposed amounting to \$4,746.75. In 3 cases sentences of imprisonment were imposed. In the fiscal year 1911 fines amounting to \$3,240 were imposed in 43 cases. Four cases resulted in verdicts for the defendant in the fiscal year 1912. In 1911 but 1 case was terminated adversely to the Government. At the close of the fiscal year 71 cases were awaiting prosecution.

The crops of grains of all kinds, potatoes, sugar, etc., are interesting as bearing directly upon that very live question of the high cost of living, and if large production has anything to do with it, there should be some reduction in prices of foodstuffs to consumers, for in almost every line the year 1912 shows a larger net yield than ever before in our history.

Had all of the cornfields of the United States been placed side by side in 1912, there would have been covered an area of land in extent half again as large as Italy and nearly as large as either France or Germany. The crop gathered from this immense acreage totaled the staggering amount of 3,169,000,000 bushels. It is interesting to note that the United States produces three-fourths of the world's crop of corn.

Her nearest competitor in production is Austria-Hungary with a maximum production of over 200,000,000 bushels, and Argentine stands third with a maximum corn production of a little less than that amount.

While the wheat crop of 1912 is not the banner one, it was not sufficiently less than the maximum yield of 748,460,000 bushels in 1901 to cause any great alarm, as this year our farmers produced within 28,000,000 bushels of that amount.

Our morning dish of oatmeal should be eaten with additional relish this year for if amount of production has the effect that is claimed for it by many economists this should be an inexpensive article of diet. The Secretary denominates the production of oats this year as "extraordinary." The crop reached an amount 46 per cent above the largest yield ever garnered before, which was in 1909, and was 51.5 per cent greater than the average oats crop for the preceding five years. The figure for this year's crop goes into the billions and is given as 1,417,172,000 bushels.

Then we must not forget the potato crop. There are few of us who do not eat potatoes every day, and many people have this vegetable on their tables twice daily. Never before have so many potatoes been produced in the United States as in 1912, when the yield was 414,289,000 bushels. That is more than four bushels each for every man, woman and child within our borders, and if everyone gets a proper share, no one in this fortunate land of ours should go potato hungry.

The United States produces only about 25 per cent of the sugar consumed in this country so the fact that our sugar-beet crop was unusually good does not have as much effect on the supply we may expect as might at first be supposed. However, taking all food crops as a whole, the country has made a splendid record, and there is every reason to believe that 1913 will be ushered in with a wave of prosperity and there is no good evidence at the present time to indicate that it should not continue with us throughout the year.

HOME MAKERS' EXHIBIT AND CONFERENCE.

THERE was held in Chicago from November 18 to 23, a Home Makers' Exhibit and Conference that is worthy of special mention, as it marked the initial effort, in a serious way, to hold an exhibit of the kind in Chicago with the prime object of education and instruction.

Heretofore public exhibitions for home makers or housekeepers in Chicago have been principally manufacturers advertising propositions, which while in a way educational, were not primarily held with that object in view. The exhibition hall in such cases was filled for the most part with booths in which manufacturers of household appliances cried their wares, and tried to sell them to visitors to the show.

The Home Makers' Exhibit and Conference held this year was under the direct auspices of the School of Domestic Science, a Chicago institution, and a dozen or more women's clubs of serious purpose co-operated in the exhibit. A limited number of manufacturers were allowed to maintain booths, but demonstration by these manufacturers was omitted. Demonstrational lectures were given by competent women teachers, many of which were illustrated in order that

the subjects might be treated as effectively and as entertainingly as possible.

The lecture program was conducted under the chairmanship of Prof. Abby Marlatt, head of the home economic department of the University of Wisconsin, assisted by members of the faculty of other universities, colleges and schools. An idea of the scope of the subjects treated may be gained by a glance at the list of names of the lecturers and their subjects, a few of which were as follows:

"Housing," by Miss Sophonisba Breckenridge, of the University of Chicago.

"The Function of Color in Food," by Dr. Albert S. Gray, economist.

"Market Inspection," by Miss Nellie Crooks of the Woman's Municipal League, Boston.

"The Department of Agricultural Work for the Housewife," by Dr. C. F. Langworthy, chief of the Department of Nutrition, Washington, D. C.

"Opportunities and Obligations of Home Economics," by Miss Isabel Bevier, University of Illinois.

"Nostrums and Quackery," by Dr. Cramp, of the editorial staff of the Journal of the American Medical Association.

"First Aids to the Housewife," by Miss Abby Marlatt, University of Wisconsin.

"Some Food Fancies and Follies," by Dr. W. A. Evans, of Chicago.

As will be noted, each of the speakers is authority on the subject treated, and those who attended the lectures received much valuable information which they could utilize in making of themselves better and more intelligent housekeepers and home makers.

At the booths were given practical demonstrations on such subjects as pure foods, home nursing, market inspection, table service, millinery, dressmaking, embroidery, etc., and in one section was maintained in operation a well equipped kitchen in which domestic science students under direction of a competent teacher mixed and cooked and baked, cakes and other delicacies.

The Illinois Food Commission had an interesting exhibit which visitors found both attractive and educational, and an attendant from the commission's office was on hand to give exact information to those who desired it concerning matters which the exhibit designed to illustrate and educate the public upon.

Exhibitions such as that of the "Home Makers' Exhibit and Conference," are to be most highly commended, and we believe that the success of the one under discussion was such as to warrant its repetition.

THE LADIES SHALL HAVE THEIR TEA.

The Treasury Department at Washington in its crusade for sanitary conditions recently promulgated an order forbidding the brewing of tea in the Department building. The order caused a great commotion among the large body of women clerks many of whom were in the habit of brewing their own tea at the noon hour, so as to have something hot with their basket lunch. The ladies brought such pressure to bear upon the Treasury officials that it was finally decided to set aside a room to which all of the tea drinkers of the Department may retire at the noon hour, each with her little teapot, and brew her customary potion.

TO IMPROVE OUR COFFEE MAKING.

BECAUSE of the widely published fact that the United States is the largest coffee consuming country in the world, it has been erroneously stated by some writers that the American people are the greatest coffee drinkers. Such is not the truth of the matter, however, for there are several nationalities more addicted to coffee drinking than are we of America.

Mr. E. Laneuville, of Havre, France (which port, by the way, as regards commercial transactions in coffee, is surpassed by only one other—New York City), recently compiled statistics of the world's consumption of coffee, showing also the per capita consumption of each country. His figures show that while the United States in 1911 consumed in the aggregate 6,885,000 bags of coffee, our per capita consumption was 9.92 pounds. On the other hand, little Netherlands used in all 700,000 bags, but her per capita consumption was 16.31 pounds. So you see that in coffee drinking, at least, the old saying is still true that "you can't beat the Dutch!" From Mr. Laneuville's statistical table, which enumerated twenty different countries, it was shown that in the calendar year of 1911 the six largest coffee-consuming countries as to quantity were, respectively, the United States, Germany, France, Austria-Hungary, the Netherlands and Belgium.

The six countries which showed the highest per capita consumption were, in the order mentioned, Netherlands, Sweden, Norway, Denmark, Belgium and the United States. While on the matter of statistics it is interesting to note that there are three countries with a per capita consumption of less than a pound of coffee. These are Italy, .44 of a pound; Great Britain, .66 of a pound; Egypt and other portions of North Africa combined, .77 of a pound.

The average American household loves its coffee sufficiently well so that the best way of making the beverage is a matter of great interest to housekeepers and cooks. It is also of concern to the commercial interests engaged in the coffee trade or any of its allied lines of business. There is in existence a National Coffee Roasters' Association, which has, because of its commercial importance to them, officially given the subject of coffee making much study. Just here it might be well to remind consumers of all kinds of food products that they owe much to research and investigations of commercial and industrial aggregations and interested individuals for the superior food products we have and the sanitary and appetizing way the vast majority of them are handled and turned over to the consumer. These commercial people give us good clean foods, not perhaps from any altruistic motive, but because it pays. Competition among honest manufacturers and distributors compels them to watch closely every possibility of advantage and chance for improvement of their product, in order to get the trade of the people, and accordingly the public is just that much the gainer in the matter.

Coffee roasting as a distinct industry of large proportions is not so very old, and doubtless many of our readers will remember when in their own homes coffee was purchased unroasted, that operation being performed by the housemother, who spread it thinly on the bottom of a baking pan and placed it in the oven to "brown," or browned it in a skillet on the stove. In such cases, "brown" was about all the effect

the process had on the coffee berries. They were not cooked, as is the case under present coffee roasting methods as carried on in the factory. It was not until 1868, we are told, that a prominent coffee company secured a patent for coating the roasted bean and made roasted package coffee popular.

Since that time commercial preparation of coffee has been constantly improved in many ways, and whether or not the coffee served on American tables is delicious and appetizing depends very largely upon the way in which it is made in our kitchens.

At the recent convention of the National Coffee Roasters' Association, "Better Coffee Making" was the subject of an address by Mr. Edward Aborn, of New York, member of a prominent coffee roasting firm, and what he had to say on the subject will interest every intelligent knowledge-seeking housewife. Mr. Aborn's address is published in part in another portion of this issue of the AMERICAN FOOD JOURNAL.

A FEW FACTS RUBBED IN.

HENRY E. NORWOOD of Riverdale, Md., recently was moved to write to the editor of the *Scientific American* a letter in which he deplored at length the "recent attacks on the Bureau of Chemistry" by that publication, which the writer of the letter rightly commends for "the keen practicability, the philosophical insight and the fairness displayed in the editorial writings." The *Scientific American's* correspondent asks the following question in the second paragraph of his communication:

"What basis has the editor for his statements that the employees generally of the Bureau of Chemistry are incompetent, that there is no harmony or co-operation among them, and that Dr. Wiley, while fearless and honest, is scientifically incompetent?"

Mr. Norwood then proceeds to defend the deposed Chief of the Bureau of Chemistry, and his associates, devoting his principal attention, of course, to Dr. Wiley, confessing himself as "somewhat of a hero worshipper in this connection."

Now, of course, it is to be expected that a "hero worshipper" will rush to the defense of his hero, whether that hero be dead or alive, physically or officially. But the fact remains that the majority of the rank and file of American people, men and women, are not inclined to "hero worship" to any great extent. The most of us expect a man to stand upon his merits and his record of service; personal friendship is not allowed to blind our eyes to glaring defects of any individual, however much we may wish that such defects did not exist, or were not so painfully apparent, if they do exist.

The editor of the *Scientific American* evidently "knows his Wiley," however, and if he gleaned his information from articles which have appeared from time to time during the past in the AMERICAN FOOD JOURNAL, it is but indicative of his keen perception and ability to recognize facts when they are presented to him for consideration.

It will not be amiss to say here that the AMERICAN FOOD JOURNAL was practically alone in its fight against Wileyism of the Bureau of Chemistry of the United States Department of Agriculture, and exerted its utmost influence looking toward his removal when other publications were afraid to come out and state facts easily obtained bearing upon his incompetence and

temperamental unfitness for the important position which he held. That the *Scientific American*, with its unimpeachable standing as a scientific authority and its well known fairness to every interest, stands exactly where the AMERICAN FOOD JOURNAL does on the subject of the Bureau of Chemistry and its work under Dr. Wiley, is very gratifying to this journal, which, as stated above, was the leader in the promulgation of the very facts which are stated so plainly and concisely in the November 23 issue of the *Scientific American*, in the editor's reply to Mr. Norwood. The editor says:

The rank and file of the Bureau of Chemistry are fairly competent, on the whole competent enough to perform effective work under the direction of able division chiefs. We cannot refrain from pointing out, however, that of the six M. D. degrees which are to be credited to six of the bureau's men, four were granted by a night medical school, the discontinuance of which was recommended by Abraham Flexner of the Carnegie Foundation on the ground that the curriculum was below the standard. One of these M. D.'s was awarded to the man who made the benzoate of soda investigations under Dr. Wiley's direction and who at that time was only a medical student. Is it likely that a doctor who has received his medical education in such an institution can compare with a graduate of Johns Hopkins, for example?

Our correspondent urges that the work of the bureau was principally routine in character; therefore scientific research does not appear prominently. This is the crux of the whole situation. The bureau has always had a most liberal Congressional appropriation. Money was not wanting for any work that the chief of the bureau and his aids wished to carry out. What institution in our country should carry on scientific research for the purpose of aiding the enforcement of the food and drugs act by studying the scientific questions involved in food manufacture and analysis, if not the Bureau of Chemistry? But such constructive work was not put prominently forward, and the positions of the bureau were not filled by the appointment of chemists who, by past training and proven ability would be able to do such constructive work.

It is evident that our correspondent is not sufficiently acquainted with the leaders of scientific thought in this country. Otherwise he would not believe that the chemists of the bureau, as well as their former chief, have a high scientific standing among chemists. The benzoate of soda experiments, which Dr. Wiley and those who aided him in the bureau still persist in regarding as scientifically conclusive, have been repeated by abler chemists with the result that totally different conclusions were reached. Not only did the Referee Board find that the conclusions drawn in the case of benzoate of soda were entirely wrong, but so did Prof. Lehmann of the University of Wuerzburg and more recently Prof. Schattner of the University of Vienna.

These are scientific men who have reputations to sustain. Chemists are more likely to accept their statements than those of Dr. Wiley and those who are responsible for the benzoate of soda experiments. When Dr. Wiley decided that lead (a cumulative poison) could be safely used in baking powder, he revealed not only his own scientific shortcomings but handed down a decision directly against the spirit of the pure food and drugs act.

One of the division chiefs, whom our correspondent regards as a man of high scientific standing, drowned instead of poisoning rabbits (as he supposed) by running a tube into their lungs instead of into their stomachs, during the course of experiments intended to show that caffeine contained in the quantities found in a popular beverage is highly dangerous. During the same experiments rabbits were permitted to contract a contagious mange because the Bureau of Chemistry men had no experience in handling animals. Surely such men are not competent to conduct research work.

In common with every other fair-minded journal in this country, the *Scientific American* regrets the appointment of the Referee Board. But it also recognizes the necessity of that appointment, because the Bureau of Chemistry is either unable or unwilling to conduct its investigations in a scientific spirit. Had the bureau done its work well in the first place, we would never have heard of the Referee Board.

Lastly, we have no desire to belittle the work that the bureau does in conducting routine examinations that lead to the detection of wood alcohol in extracts and beverages or of

harmful habit-forming drugs in household remedies. This is scientifically rather unimportant work. What we expect of the bureau is not simply analytical work but research of a fine type to determine the physiological effects of substances on which there is practically no literature; research, in other words, that involves high experimental ability. That is the most important function of the bureau, and in the performance of that function it has failed.

COMMON DRINKING CUP ABOLISHED.

There has been much agitation looking toward the abolishment of the common drinking cup, and a large number of states have passed laws forbidding its use on trains and in public places. The United States has now accomplished the much desired end and recently Secretary of the Treasury MacVeagh issued the following order as an interstate quarantine regulation:

Common carriers shall not provide in cars, vehicles, vessels or conveyances operated in interstate traffic or in depots, waiting rooms or other places used by passengers traveling from one state or territory or the District of Columbia to another state or territory or the District of Columbia, any drinking cup, glass or vessel for common use. Provided, that this regulation shall not be held to preclude the use of drinking cups, glasses or vessels which are thoroughly cleansed by washing in boiling water after use by each individual, nor shall it be held to preclude the use of sanitary devices for individual use only.

CAR FOR PRE-COOLING EGGS.

The United States Department of Agriculture has equipped a car for the pre-cooling of eggs, and will use it to make experiments in preparing eggs for shipment. A great deal has been accomplished in the way of pre-cooling fruit when it is to be shipped long distances as in the case of California points to New York, and it is hoped that good results will come from the experiments in the same direction with eggs. In mentioning the subject, *Cold* says the car uses a perforated false ceiling for supplying cold air to the goods and the air is drawn from the car to the ice bunker by means of false sides or air ducts in the walls of the car. It is probable that better results might have been obtained by drawing the air back through the perforated false ceiling and supplying it through perforated ducts or side walls. Ice and salt are used for cooling and it is stated that a temperature as low as 28 degrees Fahrenheit has easily been maintained.

PLENTY OF SAUERKRAUT.

A press dispatch from Fremont, Ohio, the center of the kraut industry of the United States, says that at the close of the kraut season late in November, owners of factories announced that the output was the largest in ten years. This should insure the filling of all orders for "wienerwursts and sauerkraut," for some time to come.

DR. WAGNER HEADS CHEMICAL ENGINEERS.

At the semi-annual meeting of the American Institute of Chemical Engineers, held at Detroit, Mich., December 5, Dr. T. B. Wagner of the Corn Products Refining Company was elected president.

FRENCH BAKERS AND THE OFFICIAL PRICE OF BREAD.

Consul Carl Bailey Hurst writes from Lyon, France, as follows on the above subject:

There has been considerable discussion in and near this district among bakers and town authorities as to the price of bread. An ominous rise in market quotations for wheat the past summer, which happily has somewhat fallen of late, and question as to higher wages, shorter hours, and cessation of night work, unsettled conditions in the bakery trade, with the result that bread had a tendency to advance in price, causing dissatisfaction if not hardship to many people.

It has been the care of several French communes and municipalities, of which Lyon is one, acting on a national law passed in 1791, to regulate the price of bread by local ordinance. A much greater number of communes and cities, Paris among others, have in practice an arrangement whereby the bakers themselves establish the price of bread. In such cases the authorities pay close attention to the action of bakers to the end that the cost of bread to the consumer is made as low as practicable. In one recent instance south of Lyon, where the official price was in force, the bakers felt themselves put on too close a profit margin by the township and struck work with the intention of leaving the population breadless. It was only after the town council through the mayor was on the point of signing contracts for the importation of the necessary thousands of loaves from a neighboring center that the striking bakers resumed work.

Method of Determining Price.

An illustration may be cited in the case of another town near Lyon where there was a lack of accord between bakers and the municipality. After repeated interviews with the baker-delegates the mayor was enabled to arrange that, from September 1 of the present year, there would be published on the 1st and 15th of each month a fixed official price for bread for the period following, calculated on the basis of the net price of the quantity of flour necessary to make 1 kilo (2.2 pounds) of bread, and the cost of kneading, baking, all other expenses, and the bakers' profit. Accordingly, under this system to make 1 kilo of the wheat bread, second quality, known as "pain de ménage," which is generally eaten by the mass of the people, it is necessary to use 750 grams (1.653 pounds) of flour. This quantity of flour now costs 28.8 centimes (5.558 cents), to which should be added 12 centimes (2.316 cents), the limit allowed the bakers by the local authorities of the town for expenses and profit. The resulting price is 40.8 centimes per kilo (3.571 cents per pound). The total thus obtained is rounded out to the nearest centime, or 41 centimes per kilo (3.589 cents per pound), which will be the price of this bread for the next 15 days.

Owing to the trouble in giving very small change for fractions of 5 centimes regular customers of a bakery pay in either one of two ways. When bread is sold at, say, 43 centimes a kilo (3.764 cents per pound), it is then the habit to pay 40 centimes on one day and 45 centimes the next, the baker losing 1 centime per kilo (0.087 cent per pound) on the two days, which, however, he does willingly for the sake of regular patronage. Or the customer may pay 43 francs when he has bought 100 kilos of bread, which is at the rate of 3.764 cents per pound.

The "pain de ménage" is usually sold in wreath-like loaves known as crowns, the favorite way of making up this bread, as it can be cut in more convenient quantity and the crowns are more readily carried. In the outlying country, where it is the custom to bake only twice a week, large, flat loaves are generally made, weighing as much as 5 kilos (11.02 pounds) or more apiece. The first quality of bread, called "bourgeois," used somewhat by well-to-do people, is sold for 48 centimes per kilo (4.201 cents per pound), 5 centimes per kilo (0.437 cent per pound) more than the "pain de ménage."

Fixing of Prices in Lyon.

In the city of Lyon only the price of the second-quality wheat bread is fixed by order of the mayor and published before the beginning of each month. The price of a kilo of this bread is equal to three-fourths of the price of a kilo of the flour of which it is made, increased by 12 centimes (2.316 cents) for the baker's expenses and profit. In order to determine the price of the flour as a basis of the calculation of the price of bread within the city limits for the ensuing month, a mean is taken of the local market quotations during the first half of the last month and the second half of the month before. As there are frequent fluctuations in the price of flour and as it is desirable to keep the price of bread as nearly stationary as possible, any slight increase or decrease, not ex-

ceeding 3 centimes per kilo (0.263 cent per pound), does not immediately affect the official price.

Effect of Changes in Price of Flour.

A rise in the price of flour is here frequently offset by a subsequent fall. Consequently, if the original price is maintained throughout, neither loss nor gain results. At the time of writing the selling price of bread per kilo of the second quality ought to be 41 centimes (3.589 cents per pound), according to the simple calculation fixed by the authorities, counting flour at its current market value, plus 12 centimes (2.316 cents) for baker's expenses and profit, but the bread is actually sold for 43 centimes per kilo (3.764 cents per pound). By the system of compensation accepted by the bakers, in pursuance of the decree of the mayor, the method works out as follows: During the month of August the price of flour was higher, and bread should have been sold at 45 centimes a kilo (3.939 cents a pound). It was sold, nevertheless, at 43 centimes (3.764 cents per pound), and the baker, accordingly, lost 2 centimes per kilo (0.175 cent per pound) during that month. Following a decrease in the price of flour, this same kind of bread could have been sold in September at 44 centimes a kilo (3.851 cents per pound), but the official price of 43 centimes was still enforced, and the baker was out of pocket 1 centime per kilo (0.087 cent per pound) on bread sold during that month. Now, during the month of October, flour being more abundant, its price is less, and bread could be sold at 41 centimes per kilo (3.589 cents per pound), but to enable the baker to recoup himself for the losses of the preceding months, he is authorized to continue to charge 43 centimes a kilo (3.764 cents a pound) for another month, when the official price will be adjusted anew.

Changes in Laws Desired by Bakers.

It is the wish of most French bakers to have abrogated the more than century-old remedial measure, enacted in a period of exceptional unrest, which authorized the local authorities to fix the price of bread. The bakers' unions are working for its repeal, and the members are of the belief they can fix a maximum price for themselves which they should not exceed. At the same time it is stated that they would leave to each individual baker the right to sell for less if he chooses.

Agitation has been rife among bakers throughout France of late as to a possible law suppressing night labor in bakery and pastry shops. A division of opinion has resulted. Among the bakery owners there is more opposition than among the journeymen bakers and apprentices. It is stated by the bakers in Lyon that the suppression of night labor would increase their general expenses, and they demand the right to work when they like, according to the needs of their customers. They state, furthermore, that when bread is made during the day its preparation and removal from the ovens would encumber their shops and they would be obliged to take larger quarters, augmenting the price of bread. Less bread would be sold, because people eat fresh bread more than that which is not quite so fresh. The question is yet unsettled, but a chief argument against the project lies in the fact that in Norway and in one of the Swiss cantons where night labor had been suppressed in the bakeries the law was repealed by reason of the difficulties of its application and the complaints of the public. Certainly, if such a law would tend to increase the price of bread in this district or elsewhere in France, there would be less likelihood of its enactment.

Large Consumption of Bread in France.

It is necessary to note that bread occupies a much more important place in the dietary of the French operative and peasant than among working people in the United States. Here prepared cereals and home-made breads are rather the exception, and the local "pain de ménage" occupies a leading place at every meal. The ordeal of bread famines in past generations, often caused by poor means of communication between the famine districts and others where grain was abundant, seems still to have its effect in the demand of the French proletariat for bread at a low price under all circumstances.

The food value of the sweet potato is generally recognized, especially in the South. The South Carolina Experiment Station has found "that by drying and grinding the dried produce into a meal the meal can be preserved indefinitely, and that it does not lose any of its flavor when made into pies and custards."

A Consular Report states that domestic science instruction has become so important in Germany that a special domestic science dictionary has been issued for the use of teachers and others interested in education for the home.

United States Department of Agriculture

OFFICE OF THE SECRETARY
BUREAU OF ANIMAL INDUSTRY.

REGULATIONS GOVERNING THE SANITATION OF RENOVATED OR PROCESS BUTTER FACTORIES.

Effective On and After November 15, 1912.

The following regulations in regard to the sanitation of renovated or process butter factories are issued by the Secretary of Agriculture in accordance with the act of Congress approved May 9, 1902 (32 Stat., 196), and the act of Congress approved August 10, 1912 ("An act making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1913").

Section 5 of the act of May 9, 1902, reads as follows:

"All parts of an act providing for an inspection of meats for exportation, approved August thirtieth, eighteen hundred and ninety, and of an act to provide for the inspection of live cattle, hogs, and the carcasses and products thereof which are the subjects of interstate commerce, approved March third, eighteen hundred and ninety-one, and of amendment thereto approved March second, eighteen hundred and ninety-five, which are applicable to the subjects and purposes described in this section, shall apply to process or renovated butter. And the Secretary of Agriculture is hereby authorized and required to cause a rigid sanitary inspection to be made, at such times as he may deem proper or necessary, of all factories and storehouses where process or renovated butter is manufactured, packed, or prepared for market, and of the products thereof and materials going into the manufacture of the same. All process or renovated butter and the packages containing the same shall be marked with the words "Renovated Butter" or "Process Butter" and by such other marks, labels, or brands and in such manner as may be prescribed by the Secretary of Agriculture, and no process or renovated butter shall be shipped or transported from its place of manufacture into any other State or Territory or the District of Columbia or to any foreign country until it has been marked as provided in this section. The Secretary of Agriculture shall make all needful regulations for carrying this section into effect, and shall cause to be ascertained and reported from time to time the quantity and quality of process or renovated butter manufactured, and the character and the condition of the material from which it is made. And he shall also have power to ascertain whether or not materials used in the manufacture of said process or renovated butter are deleterious to health or unwholesome in the finished product, and in case such deleterious or unwholesome materials are found to be used in products intended for exportation or shipment into other States or in course of exportation or shipment he shall have power to confiscate the same. Any person, firm, or corporation violating any of the provisions of this section shall be deemed guilty of a misdemeanor and on conviction thereof shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars, or by imprisonment not less than one month nor more than six months, or by both said punishments, in the discretion of the court."

A paragraph in the act of August 10, 1912, reads as follows:

"For all necessary expenses for investigations and experiments in dairy industry, co-operative investigations of the dairy industry in the various States, inspection of renovated butter, factories, and markets, one hundred and seventy thousand nine hundred dollars: *Provided*, That the sanitary provisions for slaughtering, meat canning, or similar establishments, as set forth in the act of June thirtieth, nineteen hundred and six (Thirty-fourth Statutes, page six hundred and seventy-six), are hereby extended to cover renovated butter factories as defined in the act of May ninth, nineteen hundred and two (Thirty-second Statutes, page one hundred and ninety-six), under such regulations as the Secretary of Agriculture may prescribe."

The following regulations shall become and be effective on and after November 15, 1912, and are in addition to the regulations in regard to renovated butter issued jointly by the Secretary of the Treasury and the Secretary of Agriculture under dates of July 11, 1907, September 30, 1908, and October

23, 1911 (B. A. I. Order 147, Amendment 1, and supplement thereto).

Regulation 1. Establishments where renovated or process butter is manufactured, packed, or prepared for market shall be suitably lighted and ventilated in order that a sanitary condition may be maintained. Such establishments shall be supplied with proper and sufficient drainage, having proper traps or other approved sewer connections. In order that proper inspection may be made, rooms shall, by heating or other means, be kept reasonably free from steam and other vapors; and all work in such establishments shall be performed in a cleanly and sanitary manner.

Regulation 2. All floors, ceilings, walls, pillars, partitions, platforms, stairways, etc., shall be kept in a sanitary condition, and when necessary shall be scraped, washed, painted, or otherwise treated as required. Where floors or other parts of the building, or tables or other parts of the equipment, are so old or in such poor condition that they can not readily be made sanitary, they shall be removed or replaced with suitable material. Walks, platforms, and approaches leading into establishments shall be kept clean to prevent tracking dirt into the establishments.

Regulation 3. All churns, melting tanks, workers, cans, vats, blowing tanks, settling tanks, trucks, trays, and other receptacles, chutes, platforms, racks, tables, and all utensils, machinery, and other equipment used in preparing, moving, cutting, chopping, and in otherwise handling the materials used in the manufacture of renovated or process butter, and in all processes of manufacture of renovated or process butter or its preparation for market shall be kept clean and sanitary.

Regulation 4. All factories in which milk, cream, or mixtures containing milk or cream are pumped or conducted through pipes shall for this purpose be equipped with sanitary pumps, pipes, and fittings. Pumps shall be so constructed that all parts coming in contact with milk, cream, or mixtures containing milk or cream shall be made of noncorrosive material, or shall be nicked, tinned, or coated with other approved material, and such parts shall be accessible for cleaning. Pipes shall have a smooth outer and inner surface coated with nickel, tin, or other approved material, and fittings shall have a smooth outer and inner surface coated with nickel, tin, or other approved material, and shall be of such design that no pockets or recesses occur on the inside between the pipes and fittings; provided, however, that open conductors having a smooth outer and inner surface coated with nickel, tin, or other approved material may be used in place of sanitary pipe. All pumps, pipes, fittings, and conductors shall be kept thoroughly clean and sanitary.

Regulation 5. Managers of renovated butter factories shall require employes to be cleanly. Aprons, smocks, and other outer clothing worn by employes who handle or in any way come in contact with the renovated or process butter shall be of material that is readily cleaned and made sanitary, and only clean garments shall be worn. All persons who handle renovated or process butter or any material entering into the manufacture of same shall be required to keep their hands clean, and they shall be required also to pay particular attention to the cleanliness of their boots and shoes.

Regulation 6. No person affected with tuberculosis or other communicable disease shall be employed in any of the departments or establishments where renovated or process butter is manufactured, and any employee of such establishment who may be suspected of being so affected shall be reported by the inspector in charge to the manager of the establishment and to the Chief of the Bureau of Animal Industry.

Regulation 7. All water closets, toilet rooms, and dressing rooms shall be entirely separated from the compartments in which renovated or process butter is manufactured, prepared, packed, stored, or otherwise handled; and where such rooms open into compartments in which renovated or process butter is handled they shall, when this is considered necessary, be provided with properly ventilated vestibules and automatically closing doors. They shall be conveniently located, sufficient in number, and ample in size, and fitted with modern lavatory accommodations, including toilet paper, soap, running hot and cold water, etc., and shall be properly lighted, suitable ventilated, and kept clean and sanitary.

Regulation 8. The rooms or compartments in which renovated or process butter is manufactured, prepared, packed, stored, or otherwise handled shall be free from odors coming from poultry rooms, egg rooms, toilet rooms, catch basins, or any other objectionable source, and shall be kept free from flies and other vermin; and all rooms or compartments shall be provided with cuspidors of such shape as not readily to upset, and of such material and construction as to be readily

disinfected, and employes who expectorate shall be required to use them.

"Regulation 9. Due care must be taken to prevent renovated or process butter, in any stage of its manufacture, from falling on the floor, and in the event of its having so fallen, the soiled portion shall be removed and condemned. Oil or grease collected from floors, drains, or catch basins shall not be used in the manufacture of renovated or process butter.

"Regulation 10. Only good, clean, and wholesome water and ice shall be used in the preparation and manufacture of renovated or process butter, and whenever there is any doubt regarding the purity of the water supply, notice shall be sent at once to the Chief of the Bureau of Animal Industry.

"Regulation 11. Air used in blowing or aerating the oil during the process of manufacture shall be pure and clean, and shall be taken from the outside of the building; and in order to prevent the use of air which is contaminated with dust, smoke, objectionable odors, etc., some approved method of purification, such as washing or filtering through cotton, shall be provided.

JAMES WILSON,
Secretary of Agriculture.

Washington, D. C., October 21, 1912.

CANADIAN FOOD STANDARDS.

The Canadian government has published the following standards of quality for flavoring extracts, honey, fruit and fruit products, canned peas, and lard:

STANDARDS FOR FLAVORING EXTRACTS.

1. A flavoring extract is intended for the purpose of flavoring food, is a solution of correct strength, as hereinafter defined, of sapid and odorous principles derived from an aromatic plant or parts of a plant, with or without its natural coloring matters, and conforms in name to the plant used in its preparation.

2. The usual solvents employed in the preparation of flavoring extracts are ethyl alcohol, water, and glycerin. In the event of any other solvents than ethyl alcohol, water, and glycerin being used, such solvents shall be harmless to health, and their names shall be plainly stated on the label.

3. Solutions of natural or synthetic preparations such as vanillin, coumarin, benzaldehyde, methyl salicylate, or other sapid and odorous compounds, more or less resembling substances found in plants, or absolutely identical with these, if harmless to health, may be sold for flavoring purposes, if properly labeled so as to make it quite clear that they are not extracts as above defined; and preferably by the use of the word "Artificial" or "Imitation."

4. If an extract be fortified or strengthened by having such natural or synthetic preparations as are referred to in the immediately preceding section added to it, the fact of such addition shall be clearly stated, on the label, or the word "Compound" or "Mixture" shall be used to describe it.

5. Lemon extract is the flavoring extract prepared from the lemon peel, or from oil of lemon, and contains, along with more or less of the terpenes of lemon oil, not less than two-tenths (0.2) of 1 per cent of citral derived from oil of lemon.

6. Terpene lemon extract is the flavoring extract prepared as above described, and contains not less than five (5) per cent of oil of lemon, and not less than two-tenths (0.2) of 1 per cent of citral, derived from oil of lemon.

7. Vanilla extract is the flavoring extract prepared from vanilla bean with or without sugar or glycerin, and contains in 100 cubic centimeters the soluble matters from not less than five (5) grams of the vanilla bean (the dried, cured fruit of *Vanilla planifolia*).

STANDARDS FOR HONEY.

Honey is entirely the product of the work of bees operating upon the nectar of flowers and other saccharine exudations of plants, and contains not more than twenty-five (25) per cent of water, not more than eight (8) per cent of sucrose (cane sugar), not more than twenty-five hundredths (0.25) of 1 per cent of ash, and not less than sixty (60) per cent of invert sugar.

STANDARDS FOR FRUIT AND FRUIT PRODUCTS.

1. Fruits are the clean, sound, edible, fleshy fructifications of plants, distinguished by their sweet, acid and ethereal flavors.

2. Dried fruit is the clean, sound product made by drying matured, properly prepared fresh fruit in such a way as to take up no harmful substances, and conforms in name to the fruit used in its preparation.

3. Evaporated fruit is dried fruit in whose preparation artificial heat has been employed.

4. Evaporated apples shall contain not more than 27 per cent of moisture.

5. Canned fruit is the sound product made by sterilizing clean, sound, properly matured and prepared fresh fruit, by heating with or without sugar, and keeping in suitable, clean, hermetically sealed containers, and conforms in name to the fruit used in its preparation.

6. Preserve is the sound product made from clean, sound, properly matured and prepared fresh fruit and sugar syrup, with or without spices and vinegar, and conforms in name to the fruit used in its preparation.

7. Jam, marmalade, is the sound product made from clean, sound, properly matured and prepared fresh fruit or fruit pulp and sugar, with or without spices or vinegar, by boiling to a semisolid consistence, and conforms in name to the fruit used in its preparation.

8. Fruit butter is the sound product made from fruit juice, and clean, sound, properly matured and prepared fruit, boiled to a semisolid mass of homogeneous consistence, with or without the addition of sugar and spices or vinegar, and conforms in name to the fruit used in its preparation.

9. Jelly, fruit jelly, is the sound, semisolid gelatinous product made by boiling clean, sound, properly matured and prepared fresh fruit with water, concentrating the expressed and strained juice, to which sugar is added, and conforms in name to the fruit used in its preparation.

10. When jam, marmalade, fruit butter, or jelly contains other fruit or fruit juice than that which gives its special name to the article, the fact of the presence of such other fruit shall be stated upon the label, in lettering as large and as distinct as that used in naming the fruit principally present. This requirement does not, however, apply to the use of fruit juice up to the amount of ten (10) per cent of the weight of the jam, etc., used instead of water in the manufacture of the jam, etc.

11. When the sugar in preserve, jam, marmalade, fruit butter, or jelly is wholly or partially replaced by glucose, or by any other substitute for sugar, the fact of such substitution shall be stated upon the label in plain lettering.

STANDARDS FOR CANNED PEAS.

1. Canned peas, unless specially designated as below, shall be prepared from the harvest of the year in which they are canned, and shall be the unripe peas of the crop of that year.

2. Ripe peas may be canned, provided that the label shows quite clearly that they are such. This may be done either by labeling them as "Canned ripe peas," or by the use of the word "Soaked."

3. Mixtures of ripe and unripe (or green) peas shall be plainly labeled in such a way as to show that they are mixtures.

4. Peas which do not comply with the above regulations shall be deemed to be adulterated under the adulteration act.

STANDARDS FOR LARD.

Neither lard, leaf lard, nor compound lard shall contain any added coloring matter.

Canada Makes Order As to Arsenic in Foods.

According to the *Canada Gazette*, the Canadian Government has issued an order to the effect that arsenic (As_2O_3), shall not be present in foods or food materials in excess of the following proportions (per million parts):

Citric acid	1 part
Tartaric	1 part
Cream of tartar.....	2 parts
Bicarbonate of soda.....	2 parts
Phosphoric acid	5 parts
Phosphate of lime.....	5 parts
Phosphate of soda.....	5 parts
Boric (boracic) acid.....	4 parts
Baking powders	2 parts

Synthetic Milk.

A recent consular report says that just now synthetic milk is a common topic in the German press, being lauded as the highly important discovery of Dr. Rigler, professor of hygienics at the University of Klausenburg, Austria. This milk is produced from grain by a machine of simple construction, and is said to equal the best quality of cow's milk. Milk can also be made from soy beans; it has a peculiar flavor, but a German factory has for several years successfully produced from the soy bean milk of a reputed agreeable flavor, which sells at a low price.

Last year the United States imported 45,447,329 pounds of cheese.

INTERESTING CORRESPONDENCE ANENT THE REMSEN BOARD.

We are publishing below two letters which, so far as we are aware, have never been printed in full, and we are sufficiently impressed with the statements made to be convinced that they should be given wide publicity. The first letter is one written by Dr. H. W. Wiley to William A. Rodenberg, member of the United States House of Representatives from Illinois. The second is Mr. Rodenberg's reply to Dr. Wiley. The correspondence is self-explanatory, so we print the letters without comment, as our position on these matters is well known, leaving it to each individual reader to form his own opinion as to the statements made:

Dr. Wiley's Letter to Representative Rodenberg. GOOD HOUSEKEEPING MAGAZINE.

BUREAU OF FOOD, SANITATION AND HEALTH.

Washington, D. C., May 1, 1912.

Honorable William A. Rodenberg,
United States House of Representatives,
Washington, D. C.

Dear Mr. Rodenberg: I thank you very much for the copies of your speech in the House of Representatives in favor of the Remsen Board. I have seen notices of it in the newspapers and am glad to have the full text.

There are many remarkable statements in your address, which you probably obtained from authentic sources, but which I have not been able to verify. For instance, the statement that strawberries, raspberries and grapes contain salicylic acid; that the fat of milk contains formic acid; that of the scientific explorer who observed that cranberries were the best preserved of ordinary fruits and upon analysis found that they contained benzoic acid. I have been unable to find any record of this character. If it is not too much trouble I shall be glad if you could cite me the authorities for the above statements.

I have no quarrel with those who believe that the Remsen Board has been an instrument of good; I know that it has received the unbounded support of every adulterator, misbrander and debaser of food products in the country. Your statement on page 7, referring to the judgment of the Remsen Board on benzoate of soda, namely: "a judgment which was promulgated as a ruling of the government, and which stands today as it will ever stand, as the final word on the subject. This decision is the first handed down by the Remsen Board"—is hardly justified by the only case in which this judgment has ever been called into court, namely, the celebrated case against the State of Indiana in which the Remsen Board and the whole power of the Department of Agriculture was utilized to break down the state law, which forbids the use of benzoate of soda. After careful consideration of the voluminous testimony on the matter, the master reported that the contentions of the Remsen Board were not sustained.

Your argument in favor of alum is to the effect that when there is doubt about the harmfulness of an article the consumer should bear the whole burden of the threatened injury, in order that a few mercenary manufacturers may be protected. This does not appeal with very convincing force to the sense of justice and to the sound judgment of the American people.

For four years the Remsen Board has been struggling to get a decision on the use of burning sulphur fumes in dried fruits, and has up to the present time failed to agree. Meanwhile, this poisonous substance has been used ad libitum in American foods. What would you say if the Remsen Board, after all, should condemn the use of burning sulphur fumes as injurious, when you consider that had a decision of the Bureau of Chemistry been sustained, the people would have been spared its evil effects all these years?

In other words, are the mercenary interests of a few manufacturers of more importance than the welfare of the whole people? This, it seems to me, is the great question involved in the Remsen Board, a moral and ethical question which is now being considered in all its aspects in this country, and on which our people will pronounce their judgment next November.

I am, respectfully,

(Signed)

H. W. WILEY.

Representative Rodenberg's Reply to Dr. Wiley.

June 4, 1912.

Dr. H. W. Wiley, Good Housekeeping Magazine,
Washington, D. C.

Dear Dr. Wiley: An absence from the city for several weeks has prevented an earlier answer to your letter of May 1.

I desire to say at the outset that I do not lay any claim to profound knowledge in chemistry and my speech of March 12, to which you refer in your letter, was not intended as a chemical treatise. I merely sought to use some homely examples with which to call attention to the fact that our most common foods contain in their natural form those substances, in small quantities, which would be recognized as "poisonous" if present in large quantities. The examples cited by me simply serve to give expression to the truth, which is not generally recognized, that nature has apparently distributed these "poisons" throughout the vegetable kingdom, to bless and not to curse us, and that they have been consumed by man ever since Adam occupied the Garden of Eden.

The implied invitation contained in your letter to engage in a chemical controversy with yourself is a most unexpected honor. It seems that out of some twenty-five illustrations referred to in my speech, there appear to be only four which you have not verified and for which you wish me to cite authorities. As to three of these, viz., strawberries, raspberries and grapes, I have the honor to quote you as authority. In 1906 you yourself filed with the Interstate and Foreign Commerce Committee a table showing that these fruits contain salicylic acid. (See Hearings, page 368.) If your statement was true in 1906 I presume that my statement is no less true in 1912.

So far as the statement contained in my speech in regard to milk is concerned, I will, without looking up the subject further, gladly concede your superior intelligence in chemistry to my own and admit that milk may not contain formic acid and that my statement should, in this respect, have been confined to honey. The lesson to be drawn from my admission is that I cheerfully admit my fallibility and bow to the overwhelming weight of the superior intelligence of one whom I readily concede to be my master in chemistry. I may be pardoned, however, for expressing the wish that a similar spirit had prevailed in the work which you have conducted and of which the country is not unmindful, for if you had also been willing to acknowledge your fallibility and submitted with a broad and scientific mind when the Remsen Board reached a conclusion different from your own, it would certainly have redounded to your credit.

Your insinuations regarding the integrity of the Remsen Board are noted with regret because I know how highly they are recognized throughout the country for their probity and scientific attainments. I couple these insinuations to others of a similar character which you have made from time to time, and all of which go to show your relentless and unreasoning antagonism to that body and that, too, notwithstanding the fact that when you appeared before the Committee on Interstate and Foreign Commerce in 1906 you strongly advocated the establishment of a supervisory board, similar to the Remsen Board, in connection with the administration of the Pure Food law.

I hold no brief for the Remsen Board, but I take genuine satisfaction in defending the principle typified in its appointment. If, in the practice of the law, I claim that there is no judge so great and learned but that there is one greater and more learned to whom I may appeal my case, then, it would certainly be inconsistent in me to deny this same sacred right of appeal to food-manufacturers, who seek to establish their innocence before a chemical and physiological court, even if these alleged offenders have been denounced beforehand, by those in high places, as food dopers, debasers, and crooks. Justice—common ordinary, everyday justice—is the homely name for this attribute.

You say that this Remsen Board—this court of appeals—has received the "unbounded support of every adulterator, misbrander and debaser of food products in the country." I do not know the number of malefactors who answer your characterization and I am not taking any notice of them. I am considering the question of doing justice to the vast number of honest food manufacturers who have petitioned Congress so energetically and so universally within the past few months to retain this board. Among the latter class are some of my own constituents. They are honorable men; they conduct legitimate enterprises; they purchase their supplies from farmers and other honest sources; they employ cleanly people and cleanly processes; they pay good wages to the workingmen in my district, and they fear absolutely nothing in the way of honest inquiry made in the open. Their only apprehension is of jeopardy to their business from acts born of prejudice, bias, spite, or error, which spring at them under cover and possibly at the instigation of unscrupulous competitors. Your argument that this class of manufacturers is not entitled to the right of appeal to a higher tribunal where they may defend themselves before they are con-

demned and ruined in business does not impress me very strongly.

I note your reference to a recent decision in Indiana in which you say: "The master reported that the contentions of the Remsen Board (in the matter of benzoate of soda) were not sustained." If I understand the English language, it seems to me that the hearings before the Moss Committee last summer plainly showed that the Indiana case referred to was brought to test the constitutional right of a state to legislate on this question. I am constrained to believe that the master, though profound in the law, did not presume to claim any expert knowledge in pathological chemistry, but rather that he accepted as settled facts the findings of the board and applied those facts to the law as he conceived it to be. Courts interpret the laws of man, not those of nature. It is the latter which determine the wholesomeness of an article of food, and not the laws on the statute books. Those best qualified to interpret the latter are the most valuable adjuncts to those who interpret the former, hence all the more reason for such organizations as the Remsen Board. Indeed, it is this very principle to which you seem to have appealed when explaining to the Interstate and Foreign Commerce Committee of the House, on April 29, last, a recent decision of the United States Court of Tennessee, apparently against one of your own contentions, although you seem to have overlooked this when writing to me forty-eight hours later, in your haste to quote the decision in the Indiana case against the contentions of the Remsen Board. I leave to your own sense of perception the question of justification which you charge as lacking in my original statement. I should think that your professional spirit and pride would rebel against giving voice to the suggestion that a court of law is competent to pass, pathologically, upon the wholesomeness or unwholesomeness of an article of food.

You say, further, that my argument implies that in case of doubt the "consumer should bear the burden" and that this principle does not appeal to the "sense of justice of the American people." Let the American people speak for themselves on this point. Long ago they wrote into their laws that every man is innocent until he is *proved* guilty, and that he is not finally proved guilty and to be condemned by the act or caprice of any one man; but rather not until twelve men have acted, in order that the likelihood to err, on the part of one individual, might be minimized and that the joint judgment of all might be invoked in meting out exact, even-handed justice. This principle, I undertake to say, is the measure of the "sense of justice of the American people."

However, I do not see how you can criticise me in this respect. Last winter every member of Congress received a circular letter from which I take the following statement of facts: An inspector of the Chemical Bureau, of which you were the chief, took samples of a cream-of-tartar baking powder which, according to your own analysis, showed a presence of lead. There was a hearing at which all present—scientists, manufacturers, and yourself as chief of the bureau—conceded that lead was a dangerous substance. In this there was not the least element of doubt. It was a dead sure shot. Nevertheless, after this hearing which left the

question wholly without the support of the element doubt, your vote was recorded in favor of putting this case in "permanent abeyance." What you advocate now and what you practiced no longer ago than last October proves that according to your logic if there is a question in somebody's mind about the harmfulness of a product, you deem it advisable to hold up the manufacture, no matter what the results to his business reputation, to the men whose families are dependent upon their employment, and to the farmers who supply the product; but when, as in the case I have just cited, there is absolutely *no* question of the injuriousness of an ingredient, you have no hesitancy in holding that particular manufacturer's case in "permanent abeyance," the "consumer" and his "burden" being forgotten in the meantime. In the language with which I am familiar that is neither a consistent attitude nor a fair and square deal.

Now, as to sulphur fumes: Suppose your conclusion in regard to the same had been adopted and later the Remsen Board, after a long, painstaking, physiological research had disagreed with you, would your sense of fairness have suggested any reimbursement for the manufacturer, his employees, the grower of the material, who for the time being had been put out of business?

According to your statement made in 1906, nature "puts deleterious substances in food, as she does, in almost every food." It is this union, ordained by nature, to which I called attention. No mortal act may dissolve that union, and no mortal hand may prevent it. I repeat that it must always be the quantity of the ingredient present and not its mere existence which determines the harmfulness of the ingredient itself. Nature's law is in favor of the use; man's law is to prevent its abuse.

I yield nothing to you in jealousy for the welfare of the people, nor in allegiance to the Pure Food and Drugs Act. Its beneficial effects are everywhere apparent. You have contributed no little to these and I cheerfully give you full credit for your work. The remarks to which you take exception are evidences of my humble effort to support that law and to strengthen the hands of those who administer it. I am opposed to the maladministration of the law which would sacrifice the good name of reputable and honorable manufacturers to curry favor with the multitude. Mine is I hope a comprehensive view of how the law should be administered, for I hold that there are more than fifty-seven varieties of food, and more than one kind of baking powder in this country; that the law, while primarily intended to protect the people, was never intended as an act of oppression or suppression of all these other kinds, equally legitimate and equally entitled to a fair hearing and a just consideration.

I stand for the rigid enforcement of that law. My voice, my votes, my acts prove it. I want to see it enforced justly, dispassionately, wisely, sensibly and made applicable to all and to all alike, and to this end I suggest your cooperation in the same spirit and the same way. Yours truly,

WILLIAM A. RODENBERG.

The Fifth International Corn Exposition will be held at Columbia, S. C., January 24 to 27, 1913.

"DR. RIXEY GIVES ME SACCHARIN EVERY DAY."

—THEODORE ROOSEVELT



White House episode is reported by Dr. Harvey W. Wiley, food expert, in a speech at Terre Haute, Ind.

Dr. Wiley: "Mr. President, every one who eats these products is deceived, believing he is eating sugar, and, moreover, the health is threatened by this drug."

President Roosevelt: "Anybody who says saccharin is injurious is an idiot. Dr. Rixey gives it to me every day."

—Washington Post.

Coffee and the Pure Food Law

THE second annual convention of the National Coffee Roasters' Association was held at New York November 13 and matters of interest to the members discussed. The coffee roasters are endeavoring in every way to improve conditions of their trade and have heartily co-operated with the pure food officials and inspectors in the endeavor to assure the public clean, pure coffee, to correct past abuses, and have the product in every instance correctly labeled.

Mr. William B. Harris, coffee expert of the United States Department of Agriculture, was invited to address the convention, and he read an interesting paper on "Coffee as Affected by the Pure Food Law." Mr. Harris said that the law was enacted principally in the interest of the consumer; secondly in the interest of the retail dealer, and lastly in the interest of the manufacturer; although in another sense it might be considered that the manufacturer came first.

It took away, he said, the advantage the dishonest manufacturer had over the manufacturer or packer who used sound, pure material, and placed him where he had to compete with the honest manufacturer on a fair basis.

Speaking of what has been accomplished by the Bureau of Chemistry in respect to coffee, Mr. Harris said:

"At the start the work was confined to correcting labels principally in connection with brand names. From time to time other questions have arisen which have been carefully and thoroughly investigated and considered before a decision was arrived at. Briefly, some of the important subjects brought to the attention of the board have been coffees, colored or coated, as affecting both green and roasted coffee.

"Black jack or damaged coffee, as found in skimmings.

"Low grade coffee, resulting in the ruling with reference to grade No. 8.

"Sweating, in connection with Dutch East Indian coffees.

"Compounds, chicory, cereals, etc.

"Labels, with reference to brand names, reading matter, pictures, designs, etc.

"There have been sent out by the Department of Agriculture about 1,181 communications relative to samples or in connection with some question relative to coffee. These communications are divided as follows: 355 of the letters requested general information in connection with trade customs relating to contracts, grading, testing, terms, etc.; others asked for specific information concerning Java, Mocha, Santos, robusta, black jack, skimmings and other matters pertaining to coffee.

"There have been examined about 826 samples of all kinds, including a few re-examinations prior to trials or in answer to statements made by the packers. This does not represent all the brands of coffee on the market, as inspectors from their training and experiences select only such samples as they have reason to expect are misbranded. There are, therefore, many brands that have not been examined which might have been added to the number reported correct.

"Out of these samples 584 did not comply with the law, while 243 were found to be correctly labeled. About 70 per cent were incorrect, as against 30 per cent correct. It would seem, therefore, that there was need for a pure food law in connection with the coffee business.

"The answer will be made that many violations covered technicalities of little consequence. It is a fact that in some instances this was the condition; but where is it possible to draw the line? Either samples comply with the law or they do not—that is all there is about it.

"Out of the first 100 samples sent in only seven were reported as correct. Another 100 samples received about two years later showed considerable improvement. Even then 67 per cent were in violation of the law in some particular, with 33 per cent correct. Out of 100 samples examined more recently the percentage is as follows: 60 per cent in violation, 40 per cent correct. Some improvement, but there is still much to be desired.

"So many of these first samples were such gross violation that the only course dealers could pursue when they were summoned to a hearing was to change the label. This was the result in about every case at the start, for although the first sample was examined October 20, 1908, it was not until

August 9, 1909, ten months later, that an affidavit was called for, which meant the possibility of a trial. There have been in all over fifty affidavits prepared in connection with various samples. Very few cases, however, have actually reached the trial stage, as in almost every instance before the date set the defendant has changed his plea to guilty and a fine has been imposed.

"In all about fifty-two judgments have been entered, but this, of course, does not take into consideration the samples that were corrected upon receipt of notice from the department that they violated the law in some particular.

"One of the first violations to be stopped was the coating of green coffee with lead chromate and other substances. It had been the custom to ship into this country from various ports in the West Indies coffees coated and polished as they are shipped to the Continent. These coatings, lead chromate and Prussian blue, are poisonous. The department seized an interstate shipment of coffee colored with chromate of lead, which put a stop to further adulterations of this character.

"The department has sought to protect the public against the sale of damaged coffees of all descriptions. This has not been an easy matter. Dealers who have found their coffee buyer, in his zeal to secure cheap coffee, unwise in his selections have not relished the idea of having a shipment of damaged coffee destroyed, with consequent loss. Proof of damage has not been easy to sustain, as coffee is a solid substance on which decomposition works slowly and the courts have not in every instance upheld the contention of the department. Nevertheless these coffees are no longer in evidence to any great extent.

"In this connection black jack was considered and its importation stopped. It was a most satisfactory result, as this stuff was sold to be roasted, ground and mixed with sound coffee and a heavy percentage of chicory to reduce the cost of the mixture. The chicory helping to cover the rotten character of the coffee, quantities of this black jack were roasted very high and sold as a cheap French roasted coffee.

"Very naturally this led to the consideration of skimmings, which contain black jack to a greater or less degree. The result in this regard has been the picking of skimmings, particularly those coming from shipments of coffee from the Dutch East Indies. The sound portions of such skimmings have been released by the department and the damaged portions of black jack destroyed. Many importers of Dutch East Indian coffees now order skimmings picked as a matter of course.

"Black jack as found in low-grade coffee was next considered by the board. This question was before the department for months, and was gone over very thoroughly from all the standpoints of the trade, including the Coffee Exchange. The decision of the board as finally issued was to the effect that all coffees grading below a No. 8 exchange type should be excluded of entry. This decision was later adopted by the Coffee Exchange as applying to exchange transactions, so that coffees grading below a No. 8 are no longer deliverable on exchange contracts nor are they imported.

"The mixing of Santos with Mocha for the purpose of re-packing in Mocha bundles which were afterward shipped as straight Mocha was another error which required correction. The result in this direction is shown by the fact that empty Mocha bundles which formerly sold at around 10 cents dropped to absolutely no value. Formerly there was always a market for such bundles when carefully opened. As it was claimed these empty bundles were used to replace those damaged in transit, shipments are evidently reaching here in much better shape than in years past.

"Sweating of Dutch East Indian coffees was another error of the trade that the department sought to correct. For many years sailer shipments of Dutch East Indian coffees have commanded a premium. These shipments as received were graded for color as pale, brown or extra brown. Importers have been so desirous of obtaining brown coffees that premiums have been paid to the skippers of vessels bringing in brown shipments.

"This led to the building of plants for heating and steaming coffees so as to give them the appearance of darker and better grades. Kroes have been sweated in imitation of fancy types. The department seized a shipment of sweated coffee

and the case was brought to trial. A verdict was obtained by the department covering both adulteration and misbranding.

"There have been a good many cases where ground coffee has been mixed with chicory, cereal, coffee chaff, etc., no statement appearing on the label to this effect. Now all such brands are labeled coffee and chicory, and where cereals are used compounds of coffee, chicory and cereal. Where Federal authority can dictate, as in the case of the District of Columbia, the board is insisting in connection with restaurant blends, that chicory be omitted therefrom unless the fact is mentioned on the bill of fare, the contention being that the patron of the restaurant who buys a cup of coffee should receive it or else coffee and chicory should be sold. What is insisted upon in one line of trade is surely correct in connection with the same article sold in another form.

"Let me urge the necessity of co-operation with the department on the part of the trade. Even if the points at issue are apparently small it is only by correcting them all that conditions can be made right.

"The various questions as they arise are taken up in a friendly spirit, and even when cases go to trial the points at issue are thrashed out not with a view to winning a point only, but with a determination to learn exactly what should or should not be done in connection with the great coffee industry in all its branches. It is to be hoped, therefore, that the department may receive even greater support from the members of the trade than heretofore, and that all those interested in improving conditions relating to coffee will serve the department so far as possible when called upon.

"In this connection it would seem to me that a committee might properly be appointed from among the members of the organization that would co-operate with the department in arriving at the solution of any difficulty that may arise concerning coffee in its relation to the food and drugs act."

FOOD REFINING AND HEALTH ROBBERY.

By James B. Gooken, Sc. B., M. D.

Human life depends directly on air, water and food; deprivation of any of these means its termination. Alteration from the condition in which nature intended these to be used means a deviation from normal well-being. Civilization and comfortable housing have walled off the abundance of pure outdoor air; in communistic life, water is required to be stored and carried through pipes, and the danger of sewage contamination is increased; and lastly, our pure food ideals have evolved a vastly different fare than was the lot of more primitive mankind.

The evils of air and water contamination are obvious; the improving of food, however, appears most commendable. This is true where improvement is carried on without the loss of constituents essential to the human economy. Refining of food, insofar as it takes care of the sanitary handling and freedom from disease producing contamination, the elimination of dirt and useless foreign matter, is most desirable. But there seems to go hand in hand with this some factor or process that diminishes the natural mineral contents.

That this is true is shown by the three following examples. While many other foods might in a like manner be included in this list, these have been selected because of the enormous quantities which are consumed annually, and therefore ranking them among the first in importance in our food supply.

Mineral bodies.

Average grain of wheat.....	1.75%
Unhulled rice	4.41%
Raw brown sugar.....	1.97%
Finest patent flour .....	.44%
Polished rice .....	.39%
Refined sugar .....	.01%

Every vital human function, from the minutest to the most profound, depends on mineral salts. Without the presence of these they are impossible. The most serious consequence of food variation would seem to result from the complete deprivation of food and death from starvation in a comparatively short time. Yet an abundance of food from which the mineral content has been entirely removed will cause death in even a shorter time than absolute starvation. Under such conditions food acts as a direct poison.

And in the face of this we allow the refiner to leave us only one-fourth the mineral content of the wheat. Surely our "staff of life" upon which we are so dependent cannot afford such a weakening. For the sake of the polish on our rice we are robbed of all but one-eleventh of its mineral matter; and our sugar, as we consume it, contains but one-two hundredth of this vital essential which nature has so carefully converted from the soil into an assimilable form and stored for our use.

Nature's insistent cry for a balance in mineral consumption is shown by the craving for salt. Those who have watched live-stock being "salted" after having gone without for some time need no stronger object lesson. In the human family the unrelish of food which lack of salt produces has made the salt container a permanent fixture on our table. But here again we find the salt purveyor priding himself on refining nature's product, so that it contains but the one mineral salt—that of sodium. All others being considered by him as impurities, he measures his success by his ability to reduce these to a minimum.

Table salt does in part supply deficient mineral necessity, but only insofar as sodium chloride is concerned. Physiological functions demand a variety of mineral elements and the chloride of sodium alone will not meet the requirements. This is emphatically shown by the experiments of Professor Ringer. The heart of a frog will beat for some time when removed from the body. These pulsations are continued for a considerable longer time when the heart is immersed in a dilute salt solution. But when the sodium chloride solution is reinforced by the salts of calcium and potassium the pulsations continue for an almost incredible period. The importance of these latter salts is apparent and they have an analogy in the human body.

Sanitarians, chemists and food experts have directed their efforts almost entirely toward the direct means by which food may produce ill health; namely, the addition of harmful preservative, colors, etc., and bacterial contamination. Scientific advances are pointing to a co-relation of disease and faulty mineral balance in the body, which, although more indirect, seems to be quite as important as the former as a factor in health and food supervision.

Dr. John F. Russell of New York believes that the primary cause, or at least an important predisposing cause in tuberculosis, is calcium starvation. Along these lines the experiments set forth in an article by Drs. Van Giesen and Lynch of New York, published in the *Medical Record* May 11, 1912, are so striking as to bear repetition:

"Lime starved dogs, although given every other natural element of nutrition, have their natural resistance and refractoriness to tuberculosis utterly swept away and die of the military type, some five or six weeks after the intravenous inoculation of two milligrams of bovine tubercle bacilli. But companion dogs given back their lime nutrition ten days after this inoculation doubled their weight and when killed fifty days later had arrested their miliary tubercles and were nearly barren of bacilli, whereas the continuously lime starved tuberculous dogs were literally teeming with them."

The statement was made some years ago that tubercular women are more prolific than their unafflicted sisters. In the light of more recent findings it seems that this can be reversed, that multiple pregnancies predispose to tuberculosis. For, if their is a condition of mineral starvation, it must be at its height at parturition, especially as concerns the calcium salts. All that goes to the offspring must be taken from the mother. The perverted appetite so often observed in the pregnant woman must be a craving for mineral restitution, a manifestation that it would be well to treat as such.

Quite recently a physician has found that beri-beri, the scourge of rice eating nations, has almost a specific cure in the polishings from the stones used in refining rice. It is quite plausible that the substance taken from the rice in polishing, and a comparison of the table shows it to be high in mineral content, is an essential constituent. That a protracted rice diet without this, means affliction with beri-beri.

The partaking of quantities of mineral matter as such, to balance up what is not brought to the system by the food, is not practical. Man has not the power of assimilating mineral matter direct. It must be prepared for him by plant life, which has this power, and it is only in the complex organic combinations into which minerals are thus formed that they can be brought into the human economy and serve a necessary purpose.

This suggests a new factor in food standards and the calculating of nutrition values. The now prevailing calorific standard which measures heat units produced in the combustion of protoids, carbo-hydrates and fats, and completely ignores the mineral bodies, is not only woefully inadequate in the light of modern science, but constitutes a menace to the life and health of the human race. Even a small part of the efforts now expended in other directions of food investigation would prove of great value along this line. It is a problem peculiarly up to the food control official. Whatever is done will mean much toward the accomplishing of the object of the office which he occupies—the conservation of health through the food supply.

INTERESTING CASES TO BE TRIED.

There was recently filed in the Municipal Court of Chicago a case against a local soft drink bottler charging him with the sale of soft drinks containing saccharin. The case has been set for trial before Judge Fake on January 7, 1913. This case involves the legality of a ruling made by the Illinois State Food Commission forbidding the use of saccharin in soft drinks and other foods.

On the same day will come up a case against a local vinegar manufacturer, involving the legality of so-called compound molasses and distilled vinegar. The Illinois State Food Commission has always contended that such vinegar was colored in imitation of cider vinegar and therefore illegal under the food law.

A Mammoth Loaf of Bread.

Paradoxical as it may seem, it has been proven that a loaf of bread may weigh 64 pounds and at the same time be as wholesome and "light" as the most painstaking housewife could desire. Such a phenomenon was recently on exhibition at the Hotel Grand in Kansas City, Kan. The loaf was four feet long, and 40 pounds of flour entered into its composition. Three and one-half hours were required for its baking.—*Baker's Helper*.

New Dairy Products Paper.

We have received copies of the first issues of a new dairy products trade paper, called the *Creamery and Milk Plant Monthly*, volume 1, number 1 of the publication having been issued under date of September. This new magazine is published in New York city by Thomas D. Cutler, and announces itself as a "practical guide and helper for creamery and milk plant operators and a chronicle of trade events." The first issues of the publication make a fine showing typographically and contain a number of well written and interesting articles on milk and creamery subjects.

Art Features in the Century.

Joseph Pennel, whose lithographs of the Panama Canal, published several months ago in the *Century*, attracted wide attention, and whose later newspaper illustrations of the Canal have also been the subject of much comment, will contribute to *The Century* for 1913 four new groups of pictures, including Philadelphia, the Yosemite, San Francisco, and the Grand Canon. Nearly a year ago *The Century* commissioned Mr. Pennel to go to Panama and so illustrate the progress of work on the great waterway that the American people would get a clear idea of what the Canal meant. The result was so strikingly successful that *The Century* gave Mr. Pennel another commission. Philadelphia and San Francisco are splendid subjects for his skill, while the Yosemite and the Grand Canon suggest an unending series of picturesque scenes. Timothy Cole, foremost of the world's wood engravers, will continue to show his exquisite reproductions of the old masters. The illustrators of note whose work will be seen in *The Century* for 1913 are many. Among them are Castaigne, Arthur Rackham, Dumond, Keller, Brankgwyn, de Monvel, Berger, and Birch.

The annual per capita consumption of sugar has been calculated as 100 pounds in England (much of this being used in the manufacture of preserves and jams which are shipped to many foreign countries), 83 pounds in the United States (attributed to the candy-eating habit, Americans being the largest consumers of candy in the world), 68 pounds in Switzerland (part of which is used in the chocolate factories of that Republic), 60 pounds in Denmark, 43 pounds in Sweden, 42 pounds in Germany, 40 pounds in France, 39 pounds in the Netherlands, 31 pounds in Belgium, 23 pounds in Austria, 16 pounds in Russia, 13 pounds in Spain, and 7 pounds in Italy.

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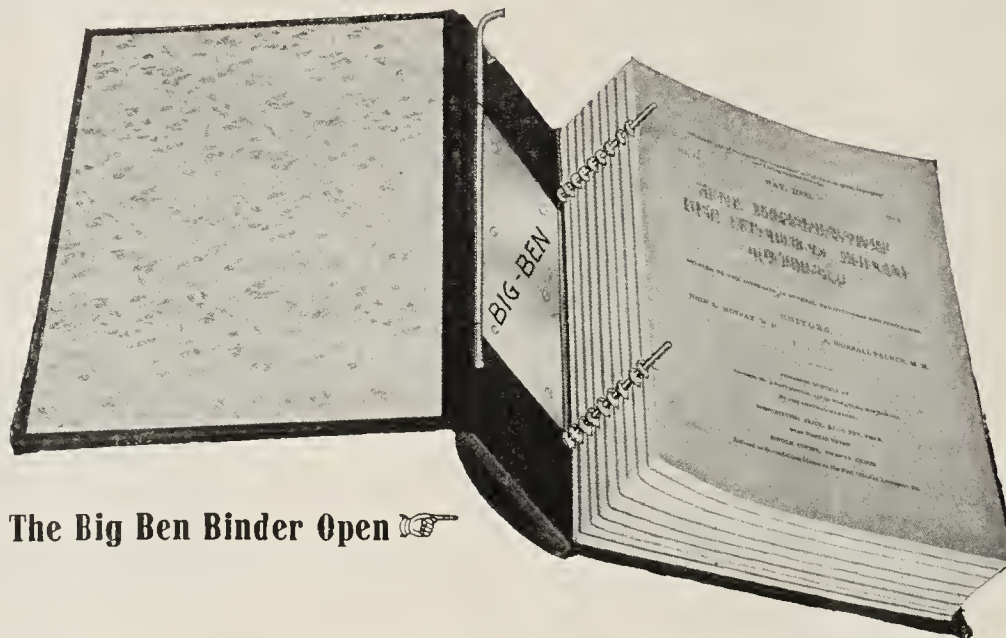
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SACCHARIN

Extracts from Remsen Board Report of January 13th, 1912.

"1. The findings of the Referee Board, based upon what would seem to be convincing, experimental evidence, are that small quantities of saccharin, up to 0.3 gram per day, are without deleterious or poisonous action and are not injurious to health. This being so, it would seemingly follow that foods to which small quantities of saccharin have been added—in amounts insufficient to result in a daily intake of more than 0.3 gram—cannot be considered as adulterated, since foods so treated do not contain any added deleterious ingredient which may render the said food injurious to health.

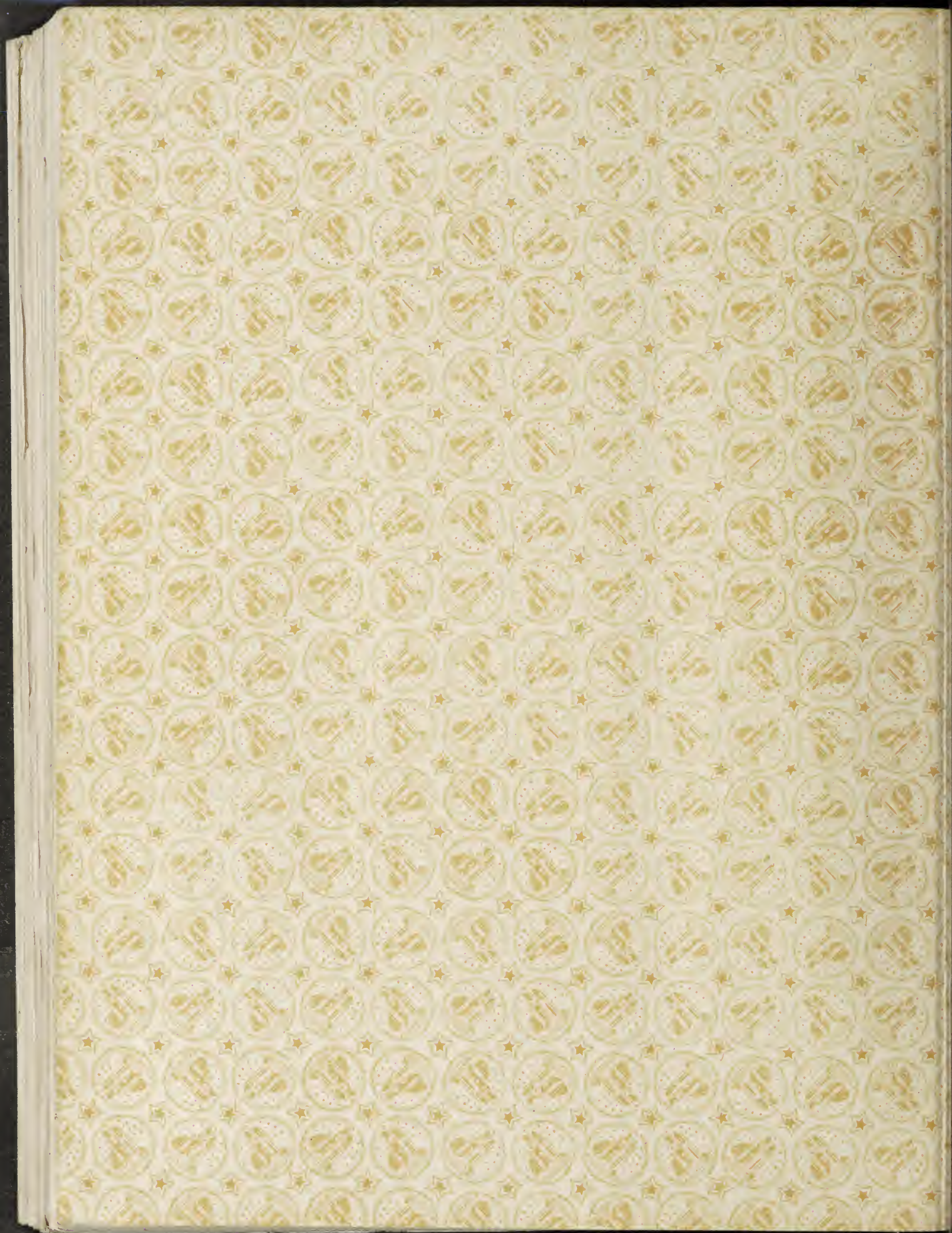
"Admitting that large quantities of saccharin—over 0.3 gram per day—taken for long periods of time may impair digestion, such evidence cannot consistently be accepted as an argument in favor of the view that smaller quantities must constitute a menace to health. It is often claimed that any substance having a deleterious effect on health when taken in large amount, must necessarily be injurious even when consumed in very small quantities, and that it is dangerous to differentiate on the basis of quantity. There is, however, no justification for such a view from a physiological standpoint. Common custom, for example, sanctions the free use of vinegar or dilute acetic acid as a preservative; yet it is well known that in larger quantity acetic acid is a dangerous substance. Common salt, while harmless when taken in small quantities, may become a serious menace to health if taken in larger quantities. The hydrochloric acid of the gastric juice is not only harmless but is essential for the welfare of the body, yet when its concentration is increased beyond a certain point it becomes a poison. It is evident, therefore, that the decision as to whether a certain substance is or is not injurious to health must take into account the quantity of the substance that is involved. The Referee Board is compelled, on the basis of the experimental evidence, to hold to the view that the addition of *small* quantities of saccharin to food does not constitute an adulteration, since there is no evidence that small quantities of the substance are deleterious to the health of normal adults.

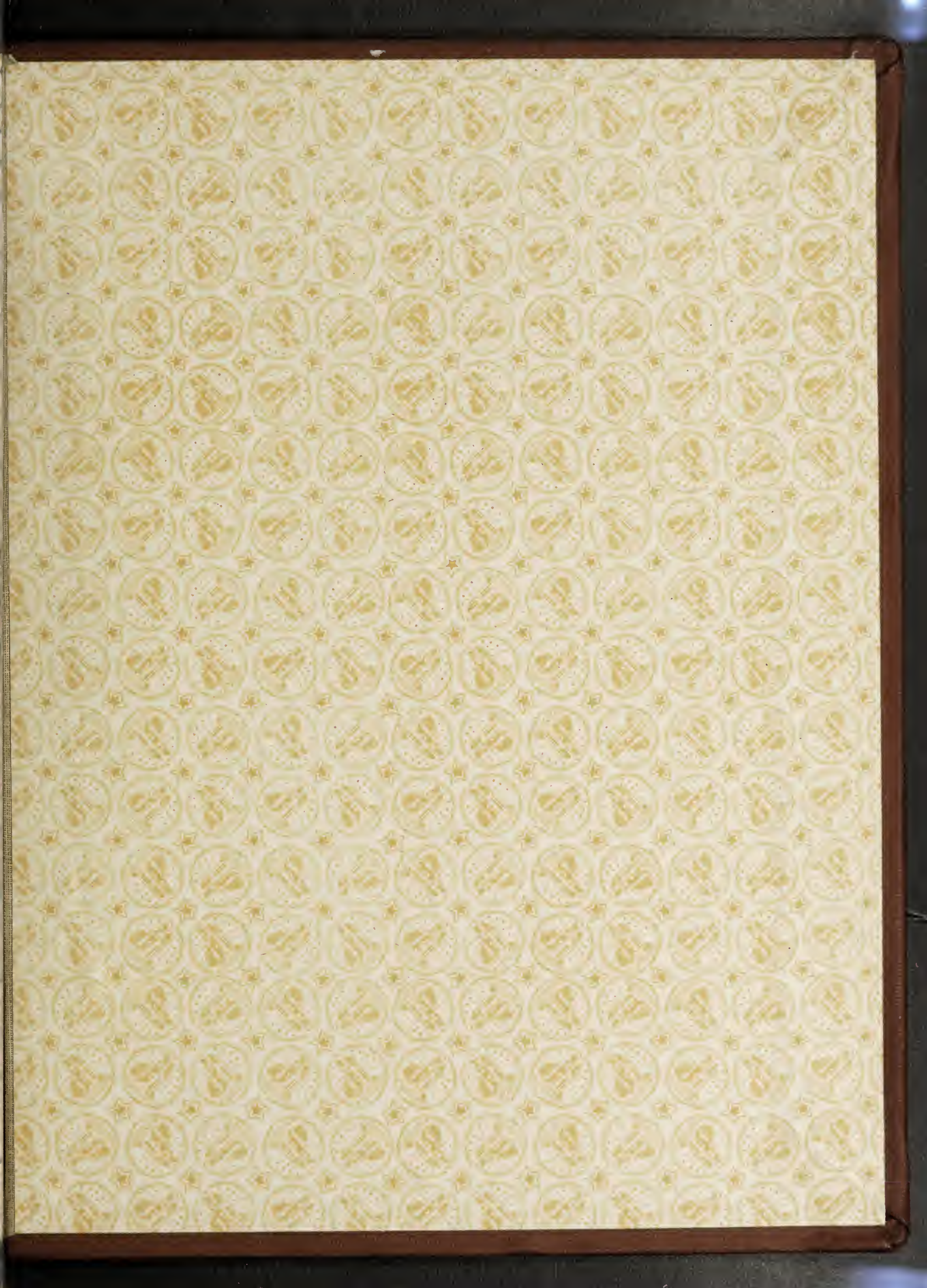
"2. The *addition* of saccharin to foods, in large or small quantities, does not, so far as the findings of the Referee Board show, affect in any way the quality or strength of the food"; and further: "In the opinion of the Referee Board the use of saccharin in food in quantities that might constitute a menace to health is improbable, since its extreme sweetness would naturally limit its consumption by the individual to amounts below what might prove injurious (in harmony with the conclusions expressed in the original report of the Board)."

According to the statistics in the Department of Agriculture as to the total consumption of sugar in the United States, it is apparent that if all the sugar consumed in the United States for all purposes should be instantly displaced with saccharin, the daily per capita consumption would be much less than 0.3 gram.

Thousands of people whose doctors advise them against the use of sugar, are using saccharin, for health, or to avoid the diseases incident to the use of excessive quantities of sugar.

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